



# IMMO UNIVERSAL EMULATOR

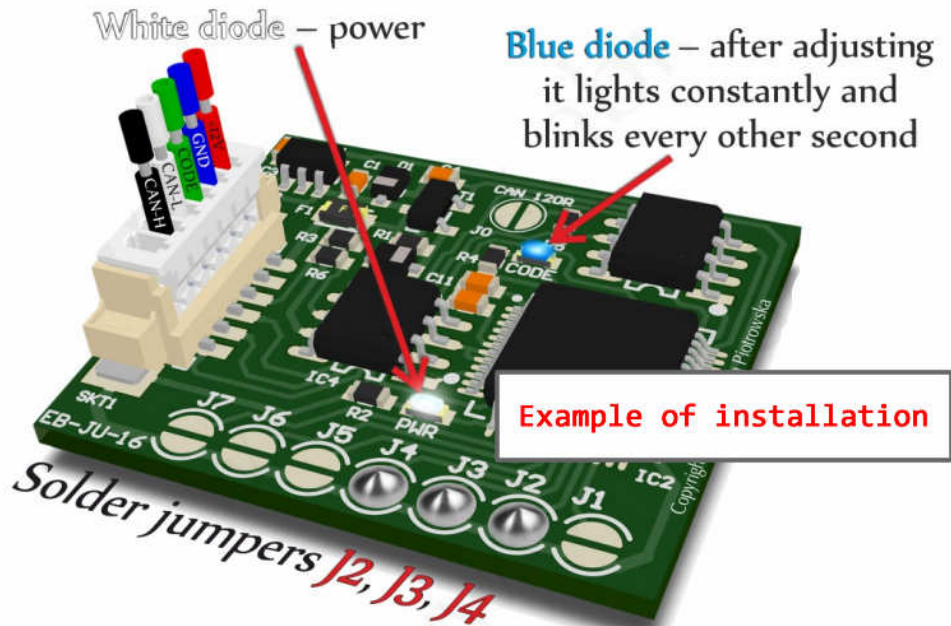
distribution by **EcuVonix Solutions**



*Manual Ver: 7.8 - 07 - 06 - 2014*

*IMMO Universal Emulator **V 5.3***

# Setting the emulator



**Audi Seat Skoda Vw gasolina-diesel to about 2000 year**

Without CAN

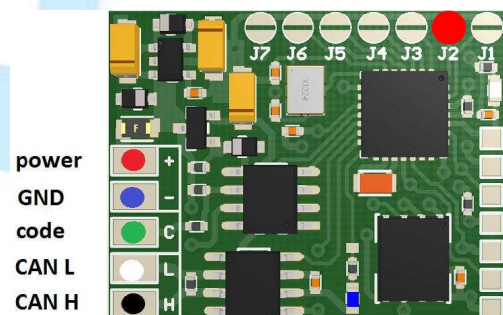
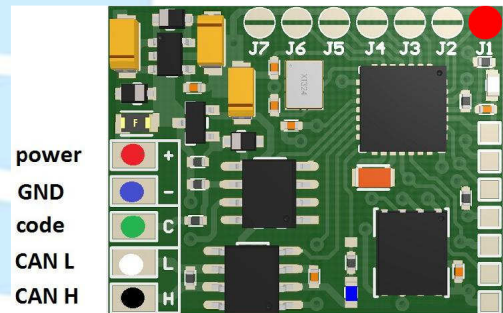
**Close Jumper J1**

Instruction pag. 10

**VW EDC15 BYPASS immo OFF (single use)**

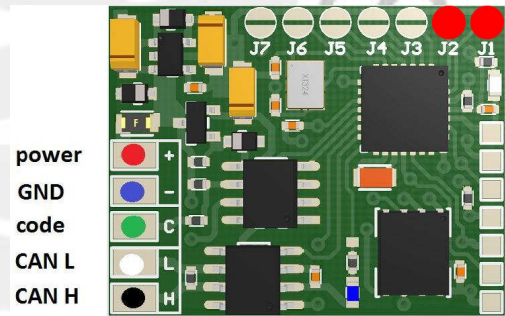
**Close Jumper J2**

Instruction pag. 18



**VW EDC15 BYPASS immo ON (single use)**

**Close Jumper J2 + J1**

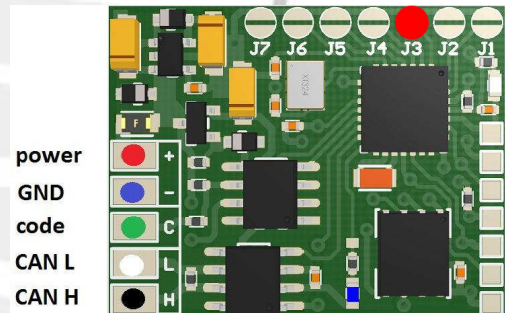


**VW EDC16 BYPASS immo OFF (single use)**

Without CAN

**Close Jumper J3**

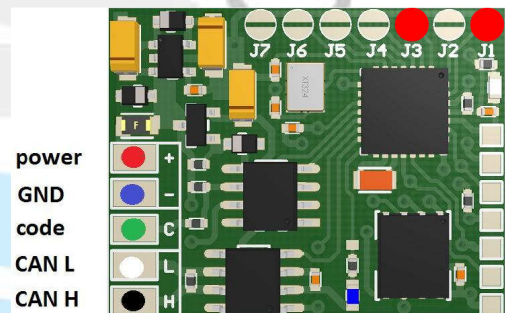
Istruction pag. 22



**VW EDC16 BYPASS immo ON (single use)**

Without CAN

**Close Jumper J3 + J1**

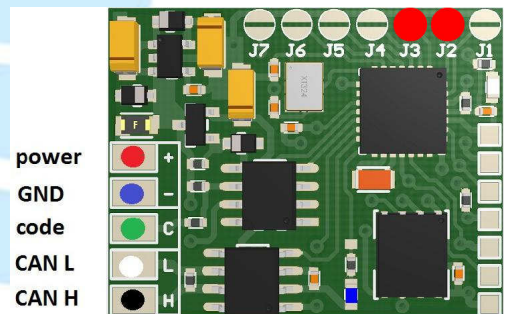


**Citroen, Peugeot, Renault ECU with processor TMS 374**

**Close Jumper J3 + J2**

Istruction pag. 26

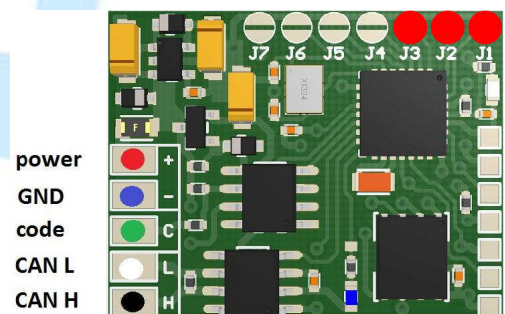
**Power Supply Emulatore +5V**



**Daewoo ECU with processor HC11F1**

**Close Jumper J3 + J2 + J1**

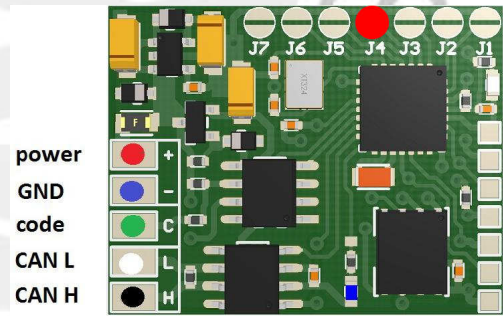
Istruction pag. 33



### Fiat, Citroen, Peugeot without CAN

**Close Jumper J4**

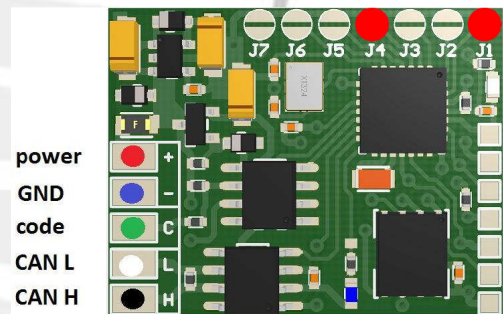
Instruction pag. 37



### Kia Sportage 2,0 Td

**Close Jumper J4 + J1**

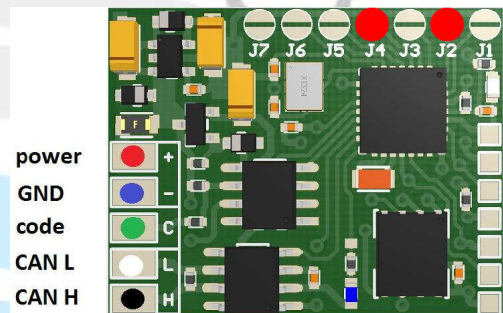
Instruction pag. 51



### Matiz, Tacuma and Lanos 1,4 hybrid

**Close Jumper J4 + J2**

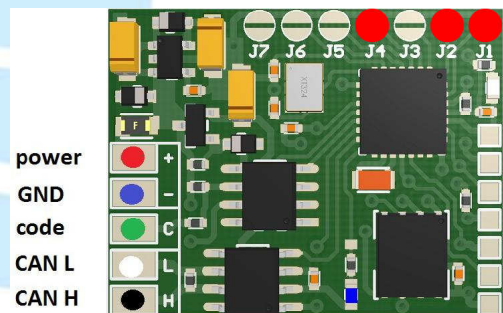
Instruction pag. 54



### Mercedes CR without CAN

**Close Jumper J4 + J2 + J1**

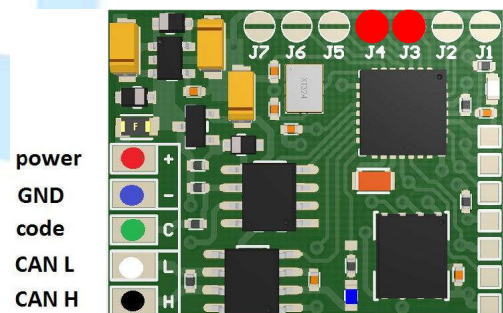
Instruction pag. 61



### Mercedes CR1 with CAN WSP

**Close Jumper J4 + J3**

Instruction pag. 66

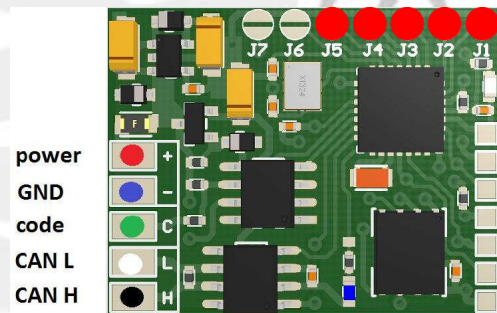




**Mercedes CR1 with CAN EZS**  
**→ Only the version V3, V4 and V5**

**Close Jumper J5 + J4 + J3 + J2 + J1**

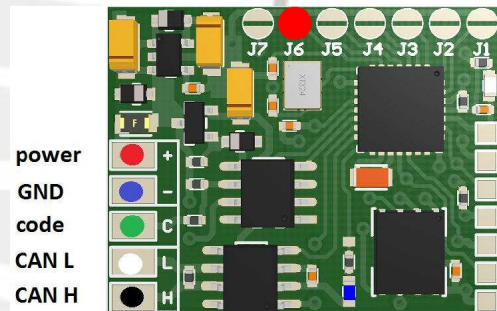
Istruction pag. 155



**Mercedes CR1 with CAN INFRARED**  
**→ Only the version V3, V4 and V5**

**Close Jumper J6**

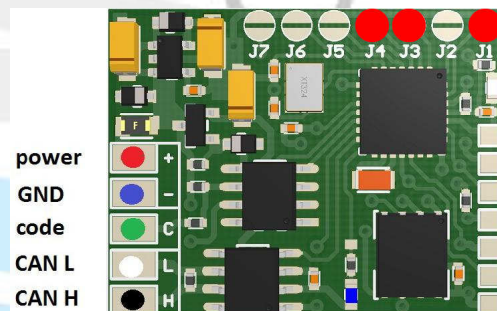
Istruction pag. 158



**Mercedes CR2 with CAN WSP**

**Close Jumper J4 + J3 + J1**

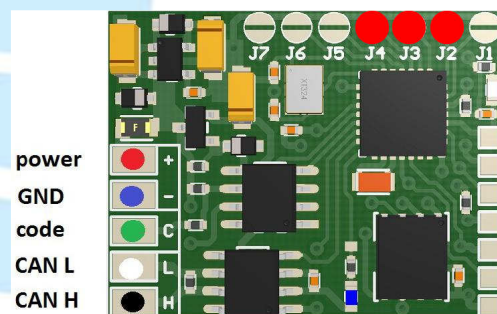
Istruction pag. 83



**Nissan from 2000 to 2002 year**

**Close Jumper J4 + J3 + J2**

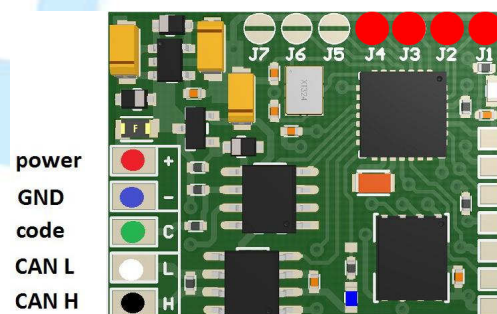
Istruction pag. 87



**Opel immo on HC05**

**Close Jumper J4 + J3 + J2 + J1**

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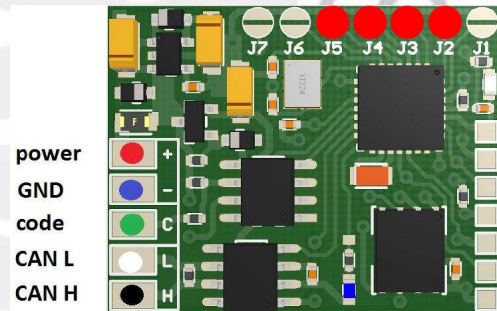


### Renault without CAN

**Close Jumper J5 + J4 + J3 + J2**

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**Important: for older versions V1 and V2 close only J5.**

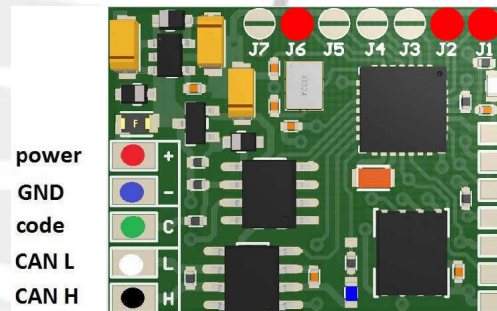


### Renault with CAN

**→ Only the version V5**

**Close Jumper J1 + J2 + J6**

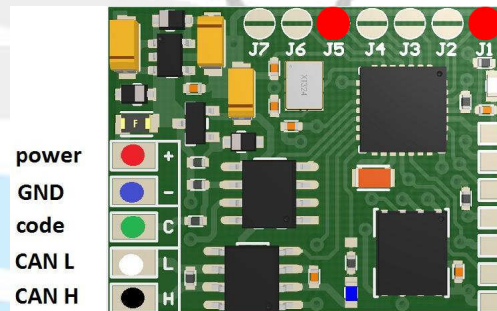
Istruction pag. 163



### Suzuki with memory OKI

**Close Jumper J5 + J1**

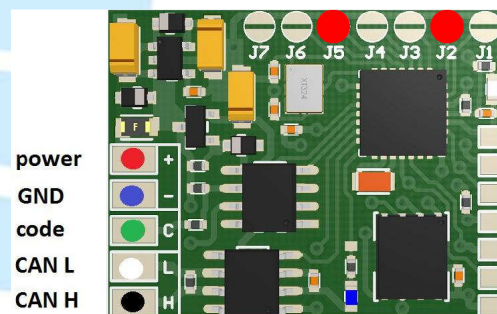
Istruction pag. 125



### Suzuki with memory X24C01

**Close Jumper J5 + J2**

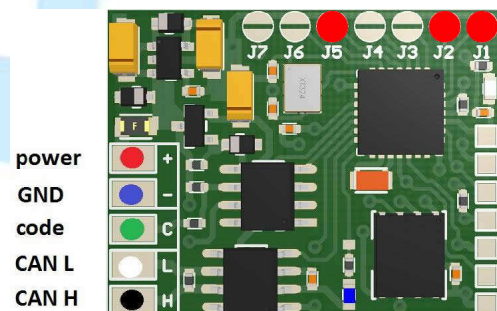
Istruction pag. 125



### Citroen, Peugeot - CAN

**Close Jumper J5 + J2 + J1**

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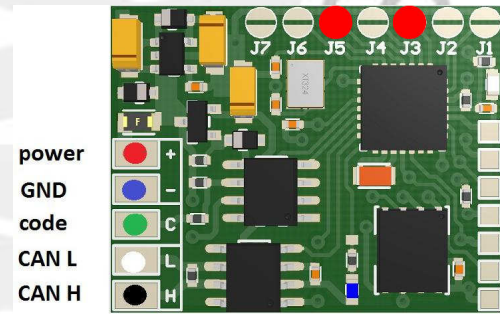


**Mercedes ESL – electronic emulation of steering column lock**

**→ Only the version V4 and V5**

**Close Jumper J5 + J3**

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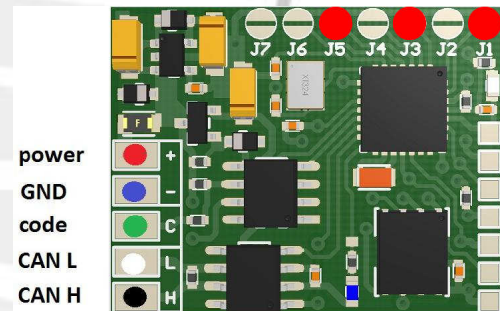


**VW EDC16 with CAN 1,9 – 2,0 Tdi immo OFF (single use)**

**→ Only the version V3, V4 and V5**

**Close Jumper J5 + J3 + J1**

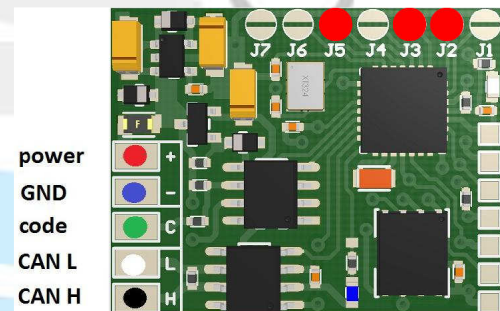
Istruction pag. 142



**VW EDC16 with CAN 1,9 – 2,0 Tdi immo ON (single use)**

**→ Only the version V3, V4 and V5**

**Close Jumper J5 + J3 + J2**

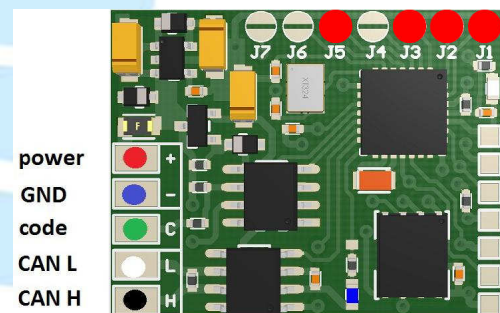


**VW EDC16 with CAN 2,7 – 3,0 Tdi immo OFF (single use)**

**→ Only the version V3, V4 and V5**

**Close Jumper J5 + J3 + J2 + J1**

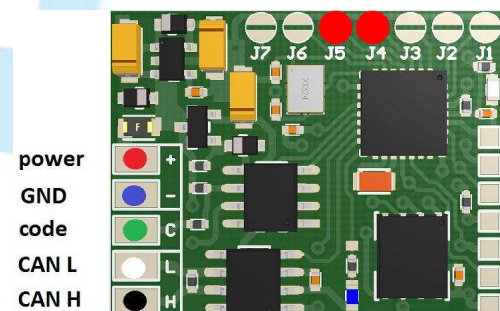
Istruction pag. 145



**VW EDC16 with CAN 2,7 – 3,0 Tdi immo ON (single use)**

**→ Only the version V3, V4 and V5**

**Close Jumper J5 + J4**



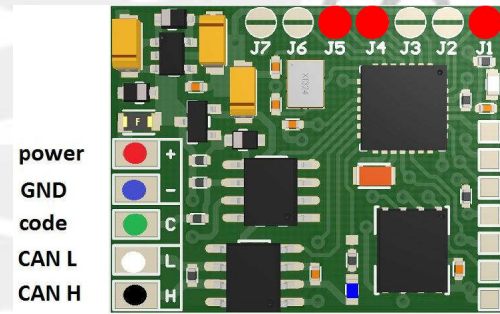


**AUDI, SEAT, SKODA, VW BOSCH ME7 immo OFF (single use)**

**→ Only the version V3, V4 and V5**

**Close Jumper J5 + J4 + J1**

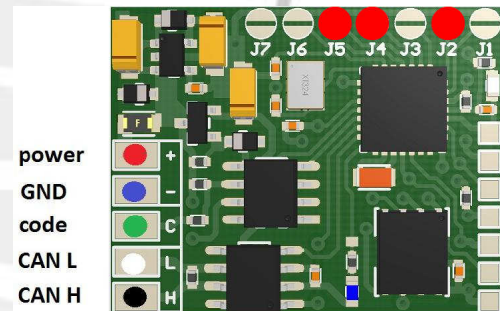
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**AUDI, SEAT, SKODA, VW BOSCH ME7 immo ON (single use)**

**→ Only the version V3, V4 and V5**

**Close Jumper J5 + J4 + J2**

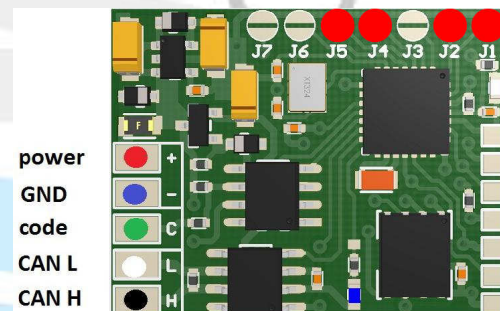


**Renault Tacho with CAN**

**→ Only the version V3, V4 and V5**

**Close Jumper J5 + J4 + J2 + J1**

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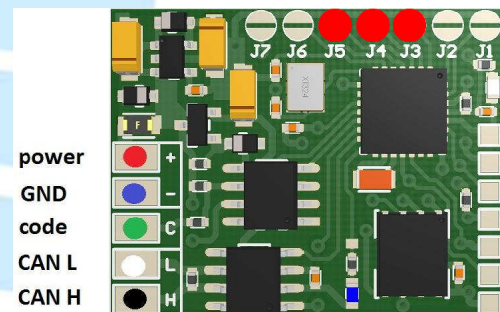


**VAG Hitachi IMMO Emulator**

**→ Only the version V3, V4 and V5**

**Close Jumper J5 + J4 + J3**

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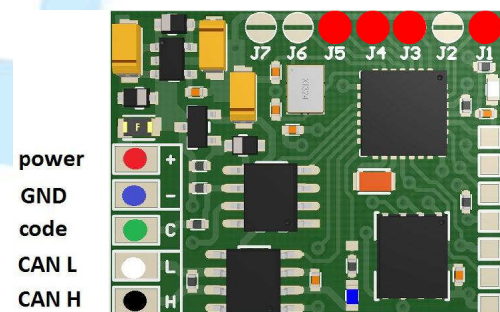


**VAG Valve CODE IMMO Emulator**

**→ Only the version V3, V4 and V5**

**Close Jumper J5 + J4 + J3 + J1**

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# Installing the emulator

## **Warning!!!**

**Due to possible construction changes of cars, before connecting the device check signals by multimeter on the ECM plug.**

## **VW without CAN**

AUDI, SEAT, SKODA, VW

Emulator immo VW without CAN – system W1, W2 to about 2001 (Engine Control Module EDC15 and LT28, LT35 with 5 plugs – if they don't have inscribed chassis number – even up to 2006). It also works in Ford gasoline and diesel with VW systems (with logo VW on ECM).

Emulator immo VW without CAN replaces damaged immobilizer or the car key.

This device is self-learning a computer code.

In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service.

Due to a low cost you leave it in the car instead of buying a new immo or making car keys duplicate.

There is a possibility of using it as the additional security!!!

### **Two LEDs indicating:**

**Green** - power

**Red** - transmission (will blink and turn off).

### **Connecting in place of the original immobilizer or instrument cluster:**

**GND** - blue

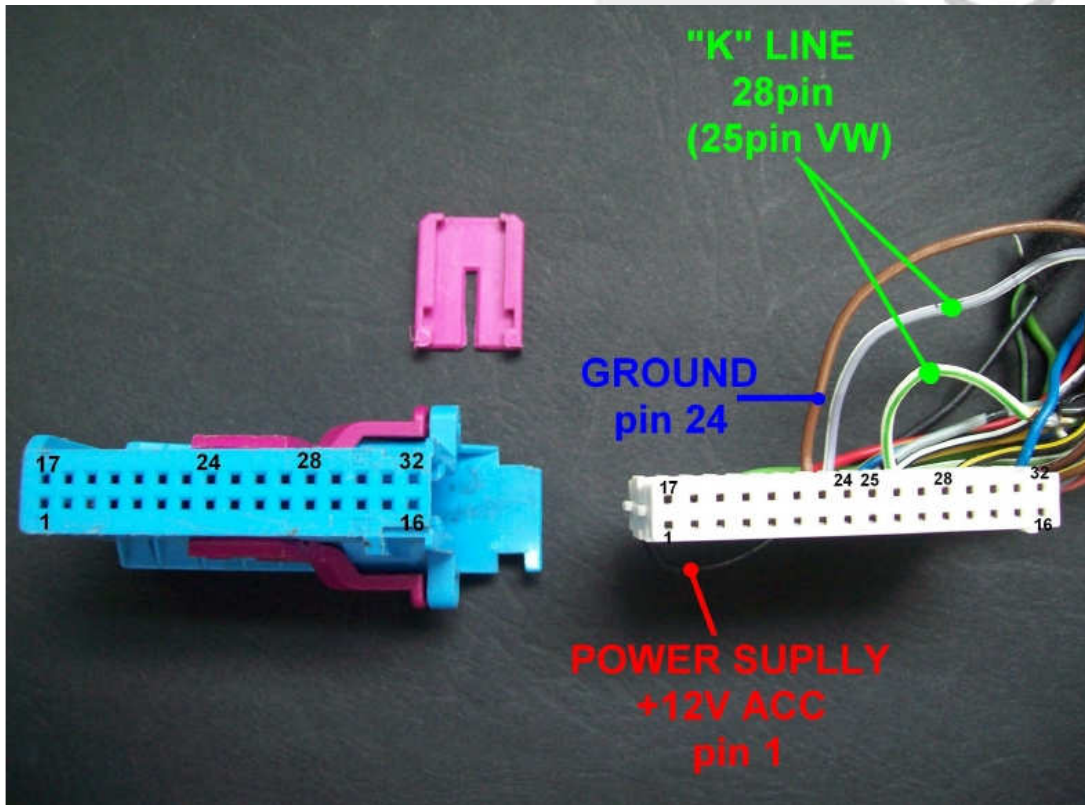
**ACC** - red

**Line W** - green

Colors of the cables may be different, please check the markings on the emulator.

**If there are problems with starting, emulator need to be solder inside to ECD!!!**

**Disconnect immo from the plug and connect W line with K line to have a diagnosis.**

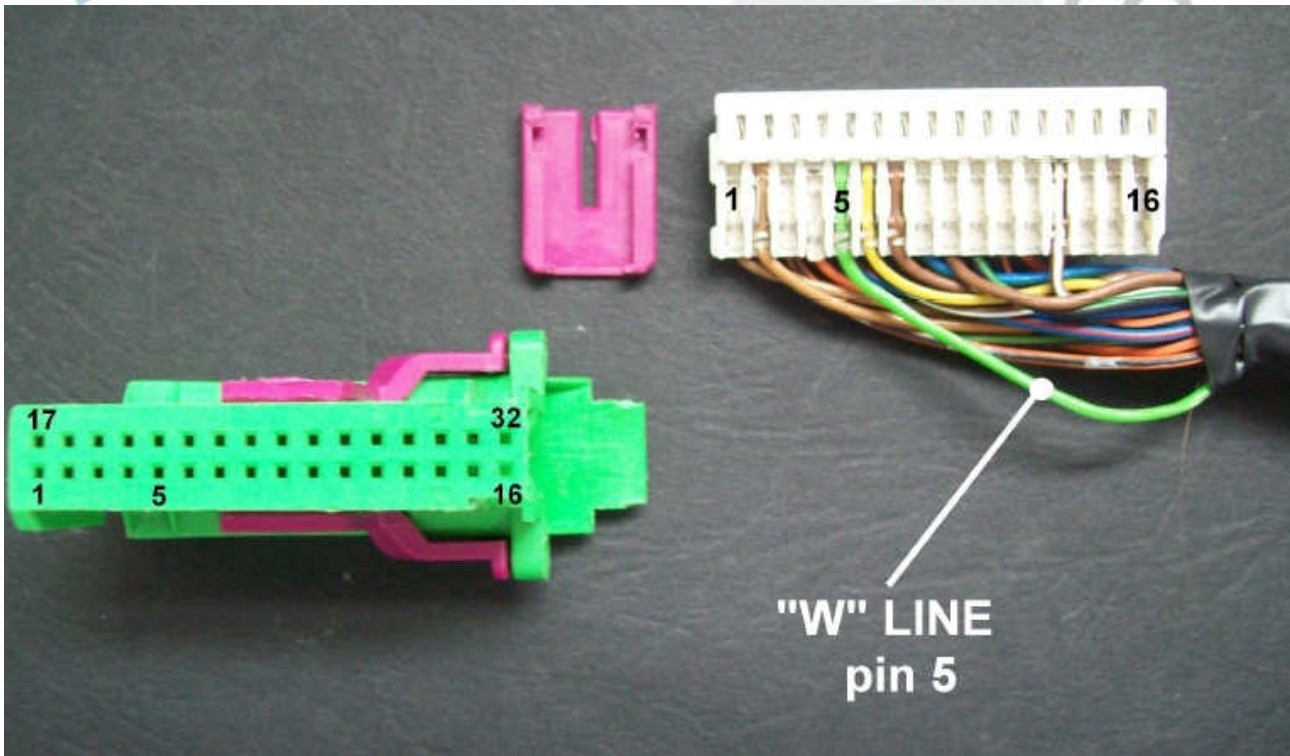


**Cars with immobilizer in instrument cluster – the cars as of 1998 year:**

**GND** - pin 24 blue plug

**ACC** - pin 1 blue plug

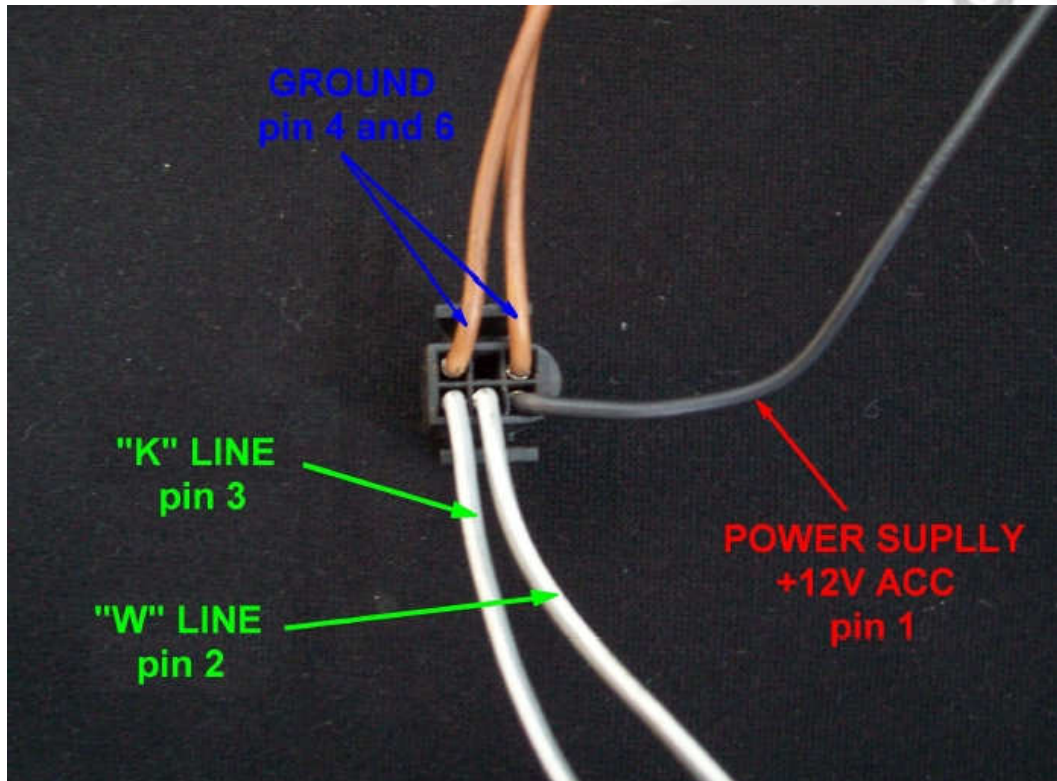
**K line** - n blue plug: pin 25 VW and pin 28 Audi.



W line – pin 5 in green plug

**K line and W line must be cut off from the instrument cluster!!!**





In the cars with separate immobilizer

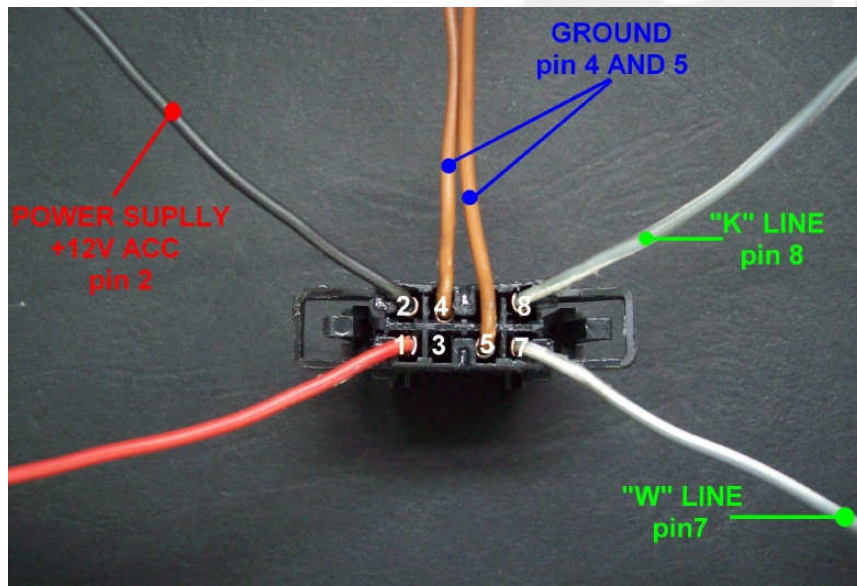
a) immobilizer plug with 6 pins:

**GND** - pin 4 and 6

**ACC** - pin 1

**K line** - pin 3

**W line** - pin 2



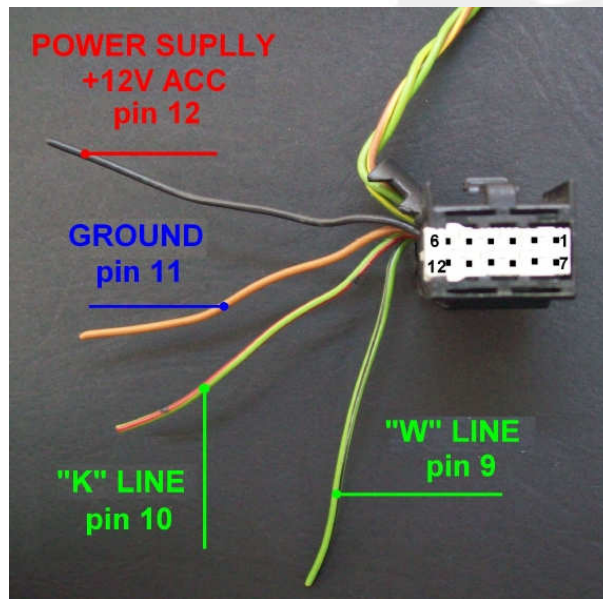
b) immobilizer plug with 8 pins:

**GND** - pin 5 and 4

**ACC** - pin 2

**K line** - pin 8

**W line** - pin 7



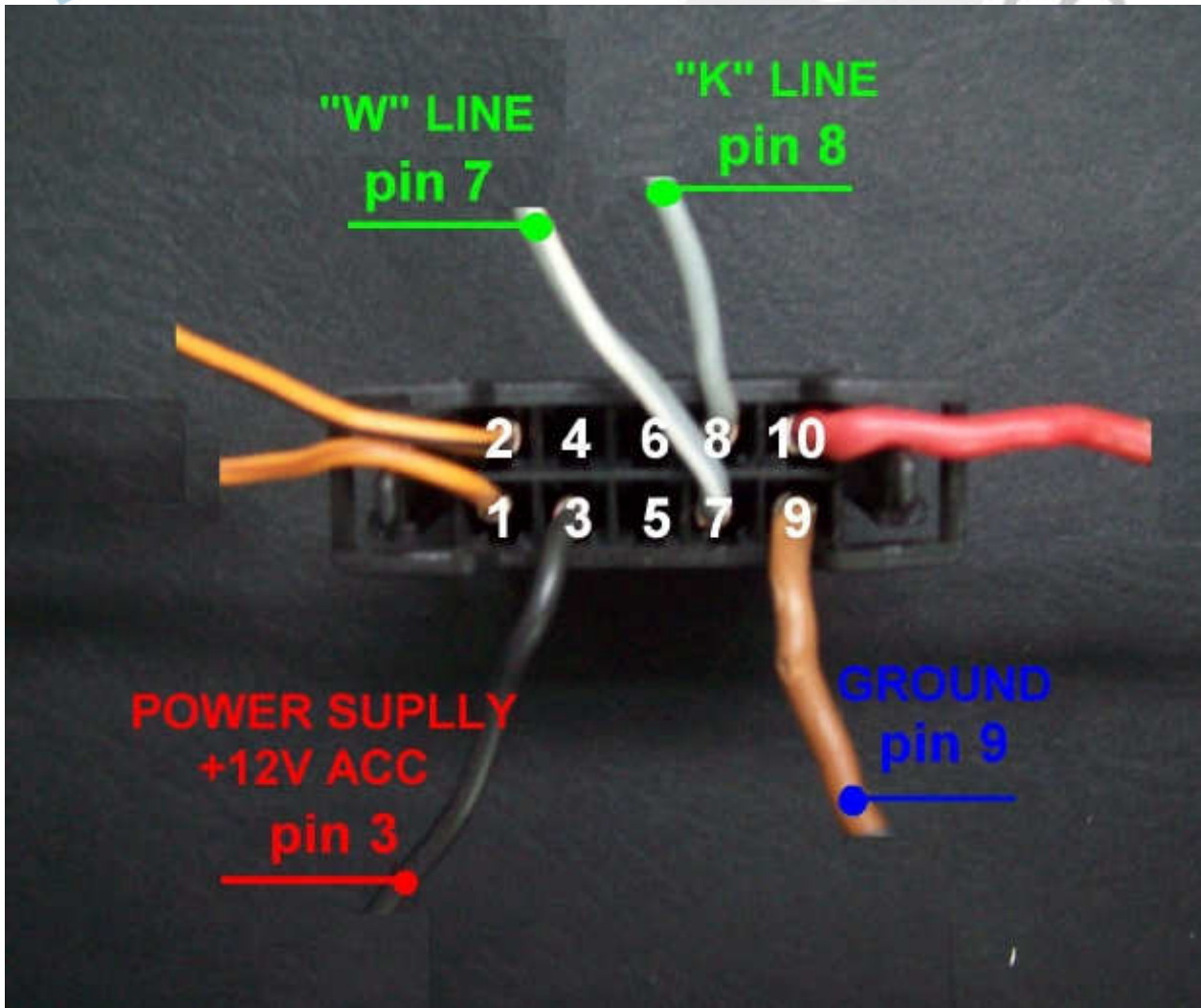
c) immobilizer plug with 12 pins:

**GND** - pin 11

**ACC** - pin 12

**K line** - pin 10

**W line** - pin 9



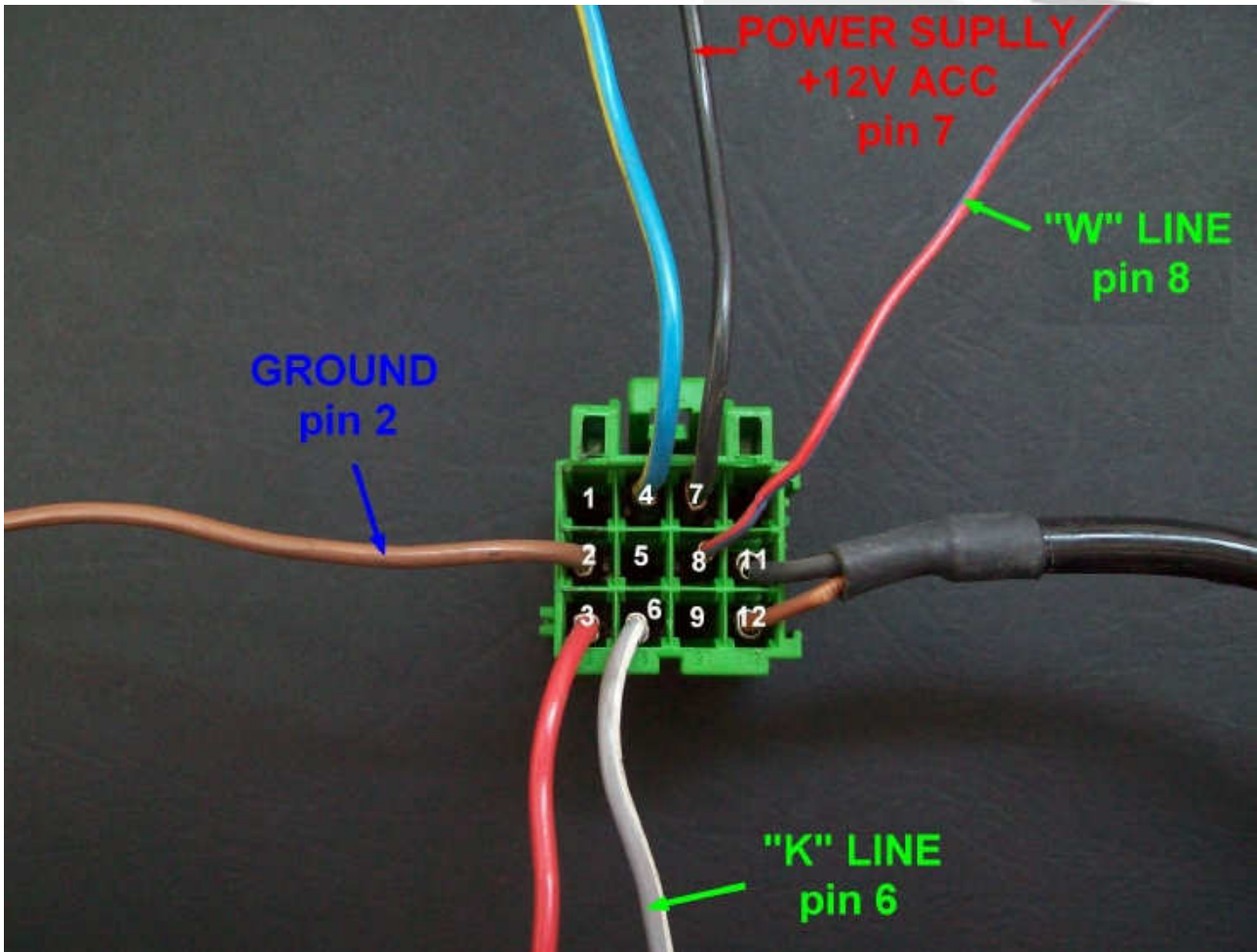
d) immobilizer plug with 10 pins (e. g. some VW T4 without CAN):

- GND** - pin 9
- ACC** - pin 3
- K line** - pin 8
- W line** - pin 7

**Connect together pin 7 and 8 in plug of original immobilizer and connect emulator to OBD:**

- GND** - pin 4
- ACC** - pin 16
- K line** - pin 7





e) immobilizer plug with 12 pins (e. g. LT35) – ECM for 2 and 5 plugs up to about 2006 year

**GND** - pin 2  
**ACC** - pin 7  
**K line** - pin 6  
**W line** - pin 8

**Or connect the emulator to original immobilizer as pictured.**

## **VW EDC15 TDI BYPASS IMMO OFF (single use)**

Emulators immo to Audi, Seat, Skoda, VW, systems W2 and W3 from 2000 year to about 2004 year (2006 year, and even to 2008 year)

Two LED's indicating:

**White** - Power

**Blue** - transmission (bling and after a while) will be flashing informing about running of the transmission).

### **Works in vehicles with 2 plugs engine control unit**

Diesel EDC15: 1.4 Tdi, 1.9Tdi, 2.5 Tdi

Replaces damaged immobilizer, instrument cluster or the car key.



Single-handedly removes immobilizer from the computer - connect it once to the diagnostic plug OBD and it works. In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service.

Cable color marking:

**GND** - Blue

**ACC** - Red

**K Line** - green

**Colors of the cables may be different, please check the markings on the emulator.**

Check before use through the diagnostic plug OBD if diagnosis with ECm is a stable.

```
Diagnostic Trouble Code Report
Thursday, 01 September 2005, 16:53:36

Control Module Part Number: 074 906 018 N
Component and/or Version: G000SG 2529
Software Coding: 00002
Work Shop Code: WSC 02743

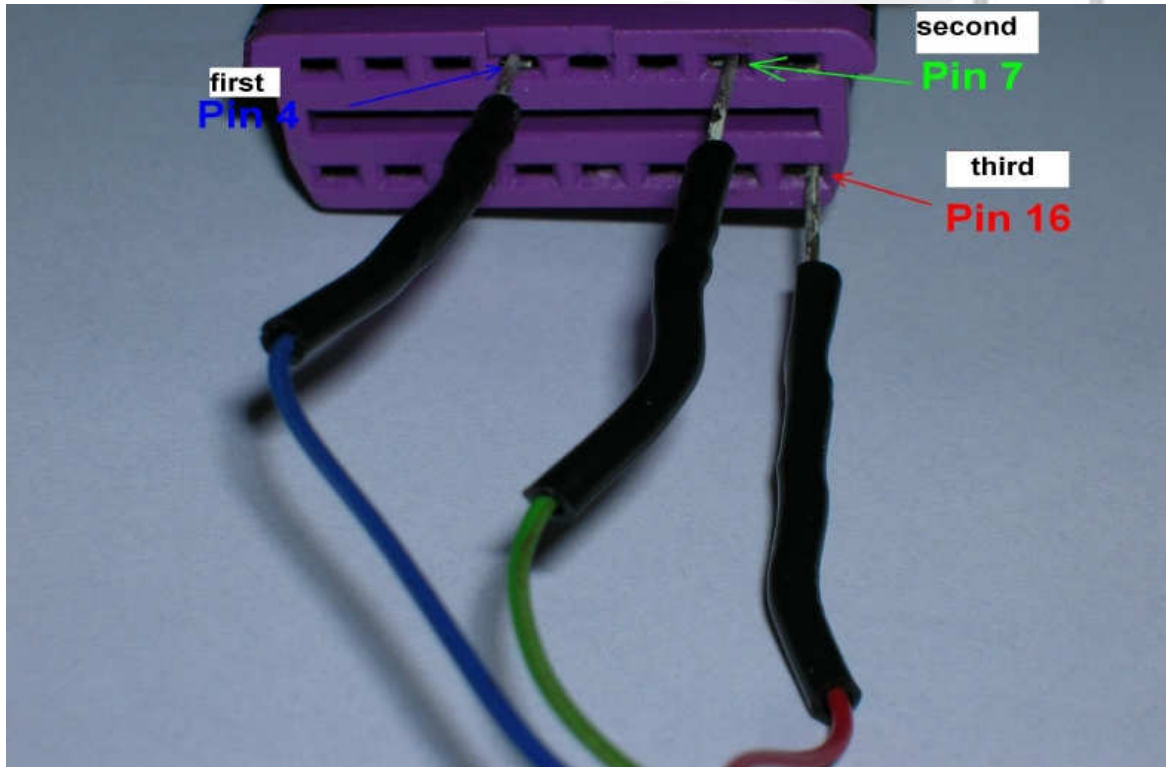
s Found:
- Engine Control Module Blocked by Immobilizer
- Quantity Adjuster (N146): Lower Limit Reached
  - - Intermittent
- Sensor for [???] (G149): Electrical Malfunction
  - - Intermittent
```

If we are connecting by any of the diagnostic interface to the ECM and there is a problem: "Engine Control Module Blocked by Immobilizer" or car does not start – then we can use emulator VW EDC15 – Tdi.

**Before connecting the emulator, the ignition switch ignition must be switched on!!!**



## OBDII 16 Pin



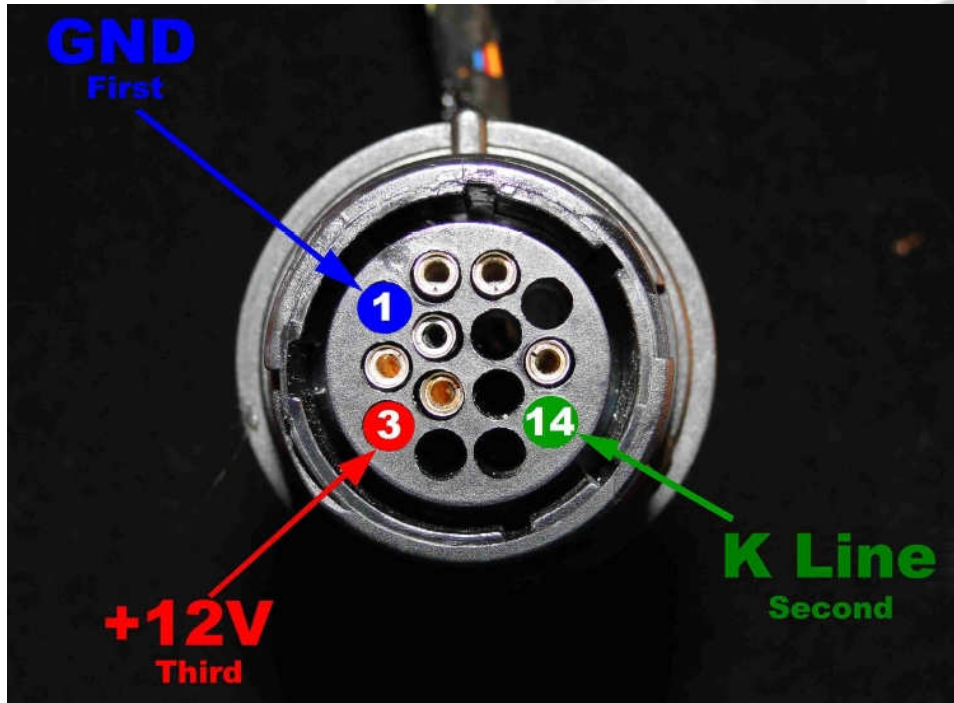
Wiring connection sequence (only when ignition switch is on) :

1. **GND** - pin 4
2. **K line** - pin 7
3. **ACC** - pin 16

**The wires must be connected precisely and in sequence as in instruction.**



## DLC 14 Pin LT



Wiring connection sequence (only when ignition switch is on) :

2. **GND** - pin 1
3. **K line** - pin 14
4. **ACC** - pin 3

The wires must be connected precisely and in sequence as in instruction.

**After connecting the last red cable to pin 16 (or pin 14 LT), white LED on the emulator blinks and after a while will be flashing informing about running of the transmission.**

**When LED goes off, wait about 5 seconds and turn off the ignition switch.**

**Take off the emulator, immo is removed permanently.**

**Emulator VW EDC15 – Tdi is a SINGLE USE and it can be used only in one car.**

Emulator VW EDC15 – Tdi does not turn off immo due to a program change in memory flash in computer:

EDC15 Audi A6 2,5 Tdi V6 2003 year  
8E0 907 401 M 0 281 011 255.

## **AUDI, SEAT, SKODA, VW**

Emulators immo to Audi, Seat, Skoda, VW - Tdi EDC16 – immo off, immo on

Two LEDs indicating:

**White** - Power

**Blu** - transmission (- adjusting to the driver – blinking 0,1 sec – after adjusting – 2 seconds is light on then will stop for 0,1 sec)

Program selection is effected by soldering properly jumpers.

**Works in vehicles with 2 plugs engine control unit:**



Use:

- Tdi EDC16 – immo off
- Tdi EDC16 – immo on

(in some drives it does not turn back immo)

Tested on drives:

**0 281 011 XXX:**

0 281 011 856 VW T5 1,9 Tdi 2005  
0 281 011 568 Vw T5 2,5 Tdi 2006/2007  
0 281 011 883 SKODA OCTAVIA 1,9 Tdi 2004-2010  
0 281 011 855 VW T5 1,9 Tdi 2003  
0 281 011 258 VW TOUAREG 2,5 Tdi 2003-2010  
0 281 011 145 VW PASSAT B5 2,0 Tdi 2006- mechanical ignition switch

**0 281 012 XXX:**

0 281 012 762 VW T5 1,9 Tdi 2006 – 2010  
0 281 012 390 VW CADDY 1,9 Tdi 2003-2010  
0 281 012 698 SKODA SUPER B 2,0 Tdi 2006  
0 281 012 696 SEAT ALHAMBRA, VW SHARAN 2,0 Tdi 2005-2010  
0 281 012 792  
0 281 012 220 VW GOLF V 1,9 Tdi 2005

**0 281 013 XXX:**

0 281 013 440 VW PASSAT C 2,0 Tdi 2005-2009  
0 281 013 302 VW TOUAREG 2,5 Tdi 2005-2010  
0 281 013 311 VW PASSAT 2,0 Tdi 2005-2009  
0 281 013 606 VW GOLF V 1,9 Td 2006  
0 281 013 299 SKODA OCTAVIA 2 2,0 Tdi 2005-2011  
0 281 013 228 VW Jetta 2,0 Tdi 2007

**0 281 014 XXX:**

0 281 014 044 VW TOURAN 1,9 Tdi 2006-2010  
0 281 014 064 VW GOLF 1,9 Tdi 2006-2008  
0 281 014 128 Tauran 1,9 Tdi 2006-2010  
0 281 014 136 SKODA OCTAVIA II 1,9 Tdi 2006-2010  
0 281 014 064 VW GOLF V 1,9 Tdi 2009

**0 281 015 XXX:**

0 281 015 175 VW CADDY 1.9 TDI 2008

Replaces damaged immobilizer, instrument cluster or the car key.

It removes immobilizer from the computer – connect it once to the diagnostic plug OBD and it works.

In case of losing the car keys or a car burglary, it enable to drive of from the road to the car service.

Cable color markings:

**Red** - power  
**Blue** - GND  
**Green** - code  
**White** - CAN L  
**Black** - CAN H

Check before use through the diagnostic plug OBD if diagnosis with ECM is a stable.

```
VAG-EMM
Windows Based VAG/VAS Emulator
Version: Beta 0.81
www.Ross-Tech.com

Diagnostic Trouble Code Report

Thursday, 01 September 2005, 16:53:36

Control Module Part Number: 074 906 018 N
Component and/or Version: G000SG 2529
Software Coding: 00002
Work Shop Code: WSC 02743

s Found:

- Engine Control Module Blocked by Immobilizer

- Quantity Adjuster (N146): Lower Limit Reached
- - Intermittent

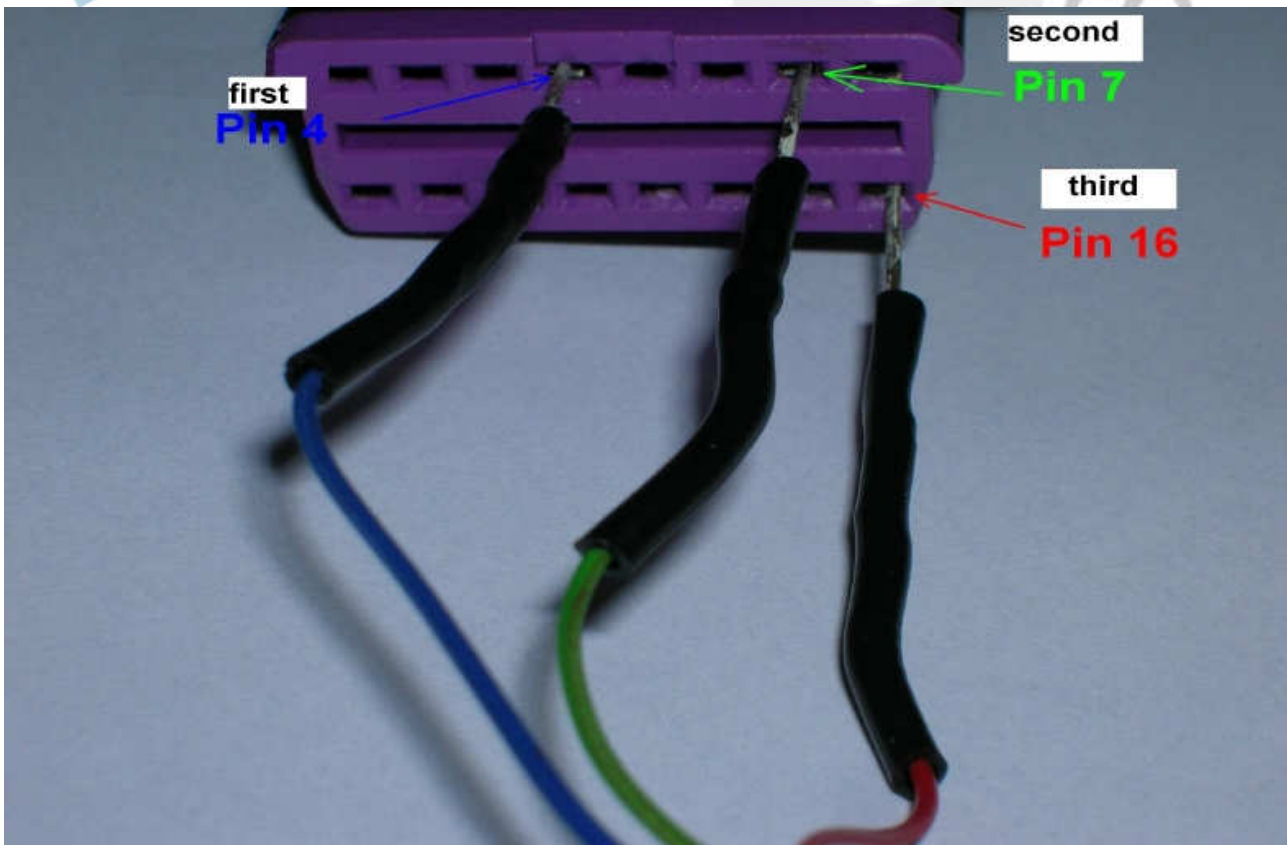
- Sensor for [???] (G149): Electrical Malfunction
- - Intermittent
```

If we are connecting by any of the diagnostic interface to the ECM and there is a problem:

“Engine Control Module Blocked by Immobilizer” or car does not start – then we can use emulator VW EDC16 – Tdi.

**Before connecting the emulator, the ignition switch ignition must be switched on!!!**





Wiring connection sequence (only when ignition switch is on) :

1. **GND** - pin 4
2. **K line** - pin 7
3. **ACC** - pin 16

**The wires must be connected precisely and in sequence as in instruction.**

**After connecting the last red cable to pin 16, blue LED on the emulator blinks and after a while will be flashing informing about running of the transmission.**

**LED is blinking fast, if after about 20 seconds it will blink slowly then disconnect emulator.**

**Emulator VW EDC16 – Tdi is a SINGLE USE and it can be used only in one car.**

## **CITROEN, PEUGEOT ENGINE CONTROL MODULE WITH PROCESSOR TMS374:**

- Sagem SL96
- Magneti Marelli 1AP20, 1AP40, 1AP41.1AP43, 1AP80, 1AP81, 1AP83, 1AP90

Renault Engine Control Module with processor TMS374:

- Siemens Fenix 5
  - Sagem Safir 1
  - Sagem Safir 2

Emulator immo TSM 374 enable to take off immo permanently.

In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service.

**Emulators immo TMS 374 works without quantitative restrictions  
(you can use it repeatedly in many cars)**

Two LEDs indicating:

**Green** - power

**Red** - transmission (it lights for about one minute and turn off)

### **Before unblocking, cut off the immo cable from the ECM plug:**

Sagem SL96 (cut pin 48)

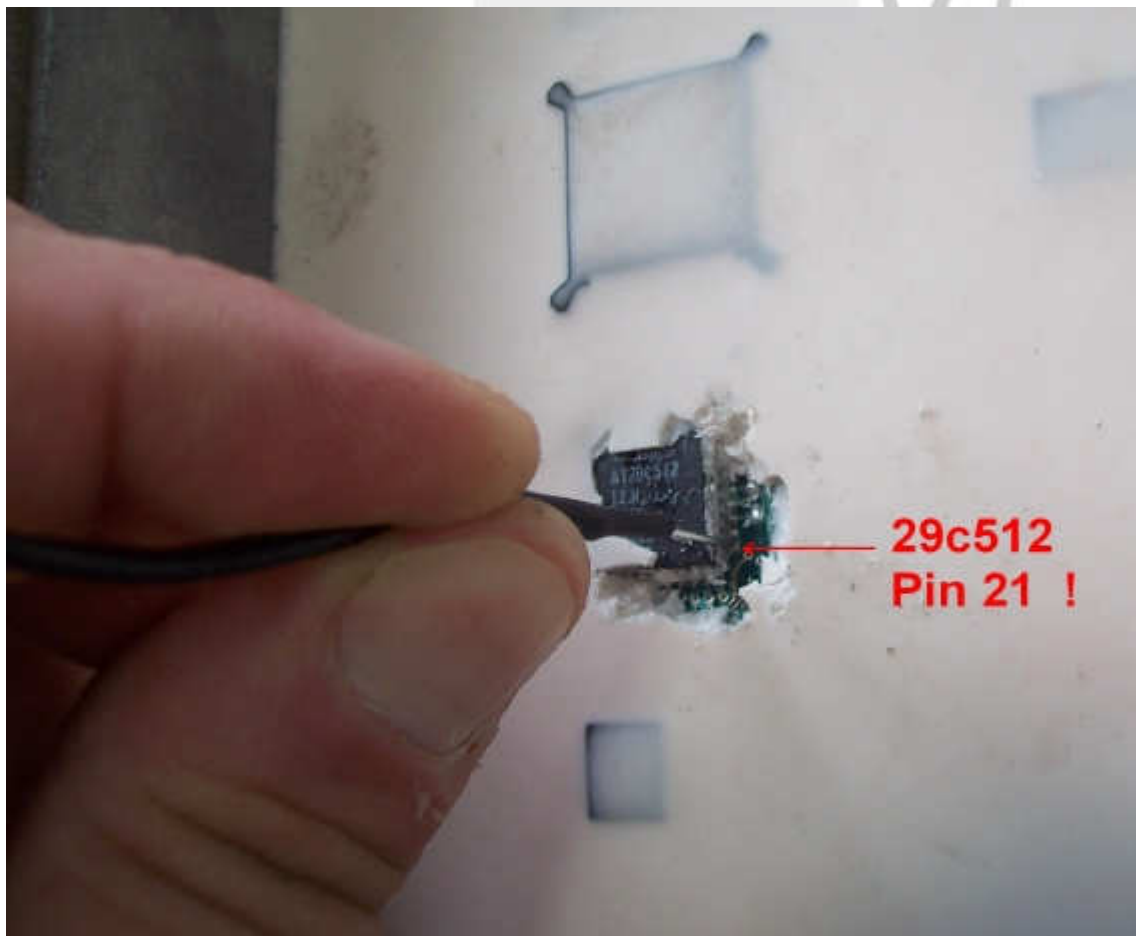
Magneti Marelli 1AP (cut pin 48 and 27)

Fenix5 1,4 and 1,6 (cut pin 37), 1,8 and 2,0 (cut pin 35)

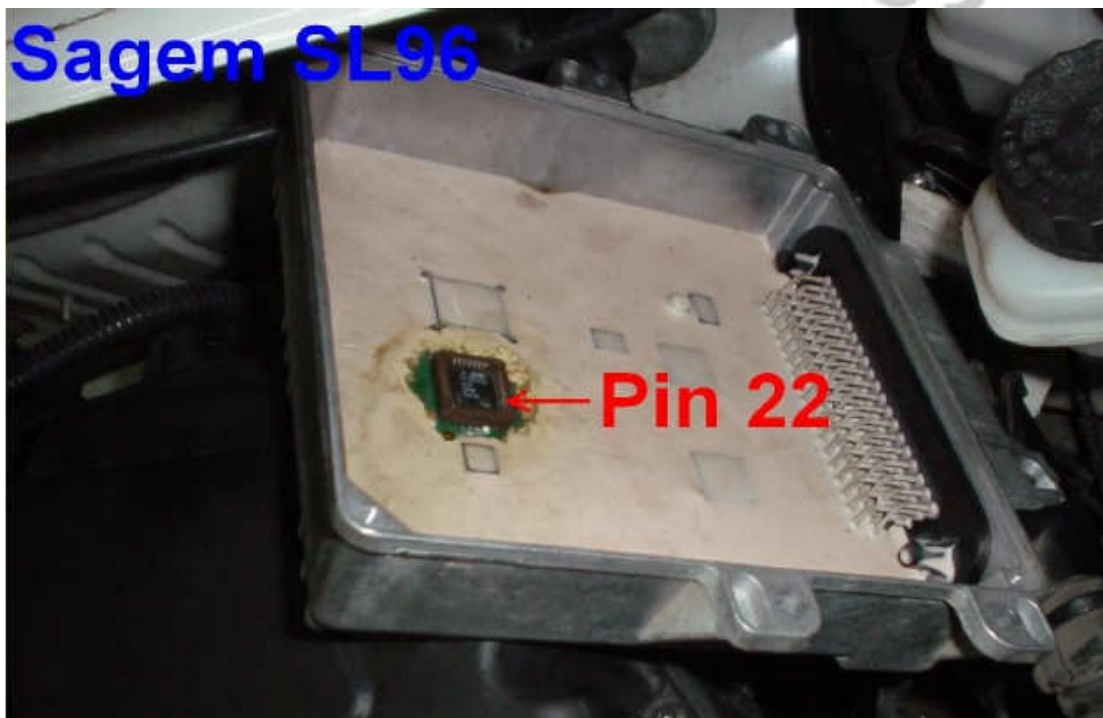
Sagem Safir1 35-pins (cut pin 30)

Sagem Safir2 55-pins (cut pin 37)

**After cutting off the immo cable find in Engine Control Module pin 22 of flash  
28f512 or 29f010 or pin 21 of eeprom 27c512 or 29c512**



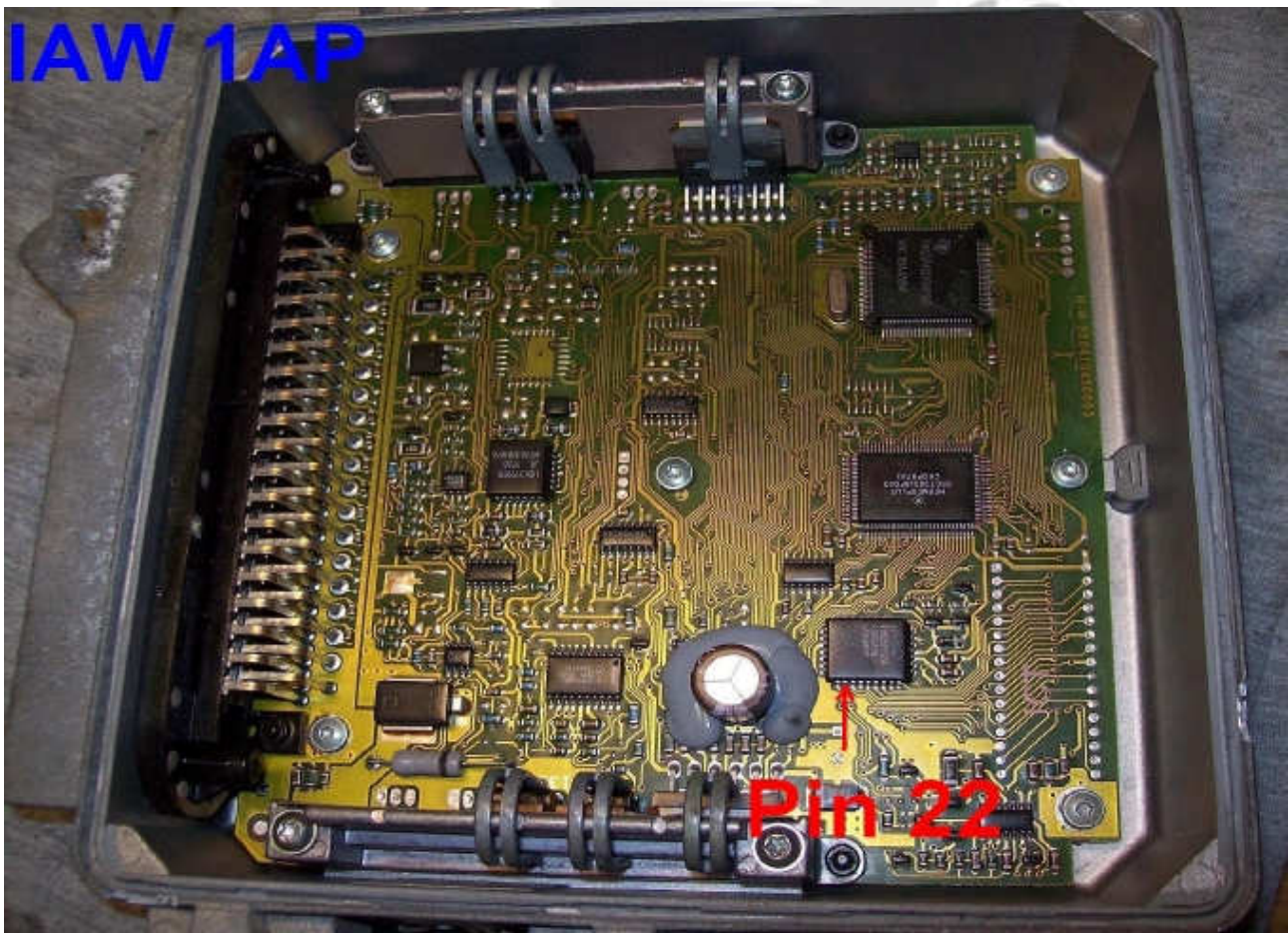








**IAW 1AP**





**Siemens Fenix5  
pierwsza wersja**





# Siemens Fenix5 druga wersja ●



## Sagem Safir



**After cutting off the immo cable from the plug of Engine Control Module, by head of the cable connect pin 22 of 28F512, connect supply plug to the car cigarette lighter and turn on the ignition. Wait one minute till LED emulator will turn off.**

**Afterwards turn on the ignition and wait 5 seconds, then turn off the ignition and wait 5 seconds (repeat this action 7 times).**

Disconnect head of the immo cable and check if car will start.

**If we have a problem with unblock the engine control module:**

- disconnect for about 30 seconds "minus" battery before start this procedure again,
- during the procedure repeat turnovers of the starter.



## **DAEWOO ECU WITH PROCESSOR HC11F1**

**With white - red plug  
with blue plugs**

Emulator immo to Daewoo cars replaces damaged immobilizer or the car key.

It is necessary to made changes in memory content of Engine Control Module.  
In case of losing the car keys or a car burglary it enable to drive off from the road to the car service.

Due to a low cost, you can leave it in the car instead of buying a new immo or making car keys duplicate.

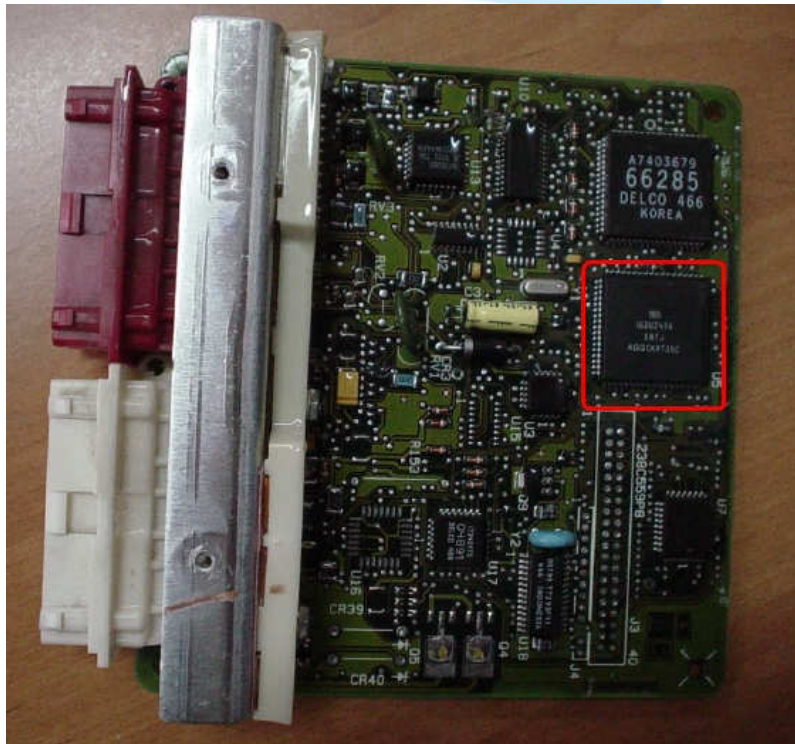
Ther is possibility of using it as the additional security!!!

Two LEDs indicating:

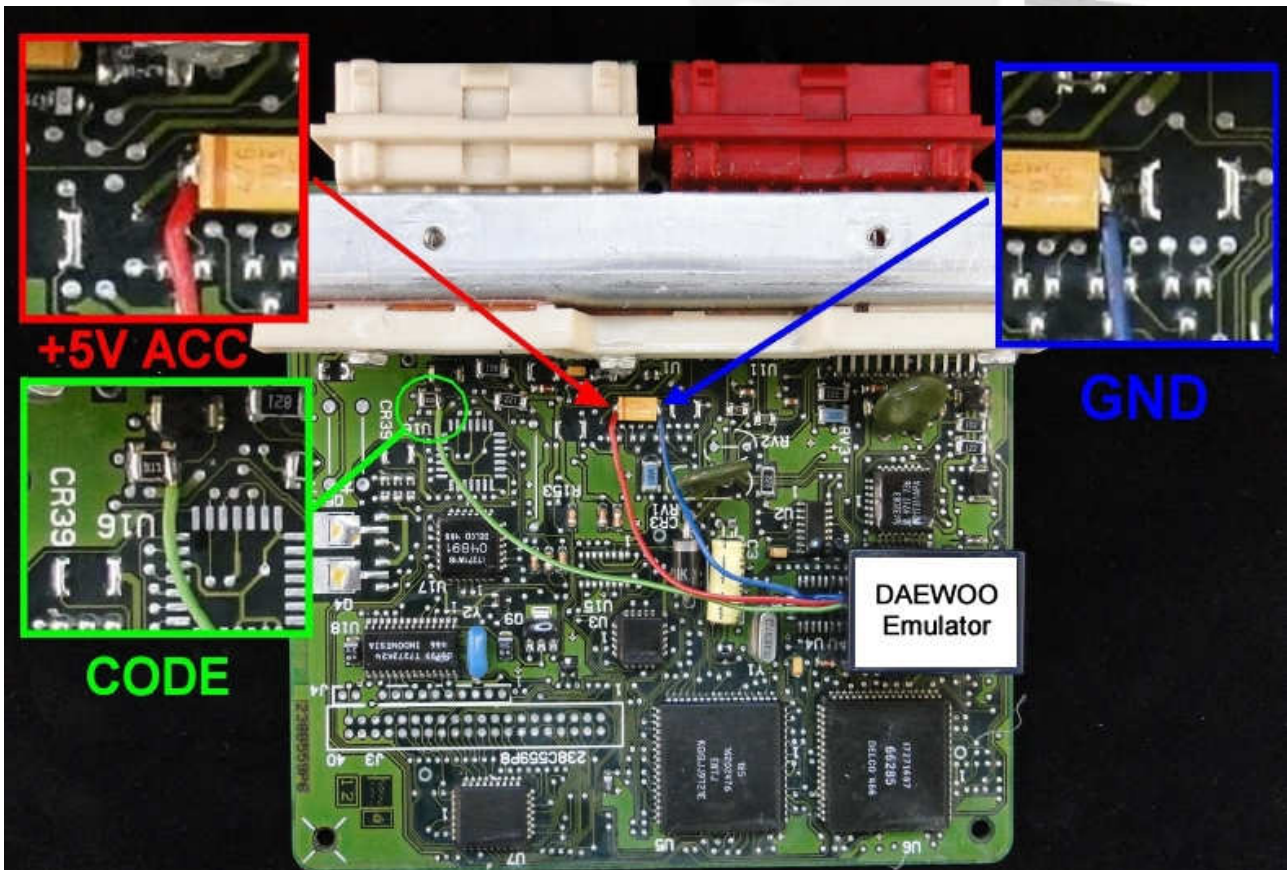
**Green** - power

**Red** - transmission (after adjusting it blinks each 2 seconds).

### **ECM with white - red plug**



- 1) Run the reading of the Motorola MCU HC11F1
- 2) Process the file with the software IMMO Universal Emulator
- 3) Write with the new file generated



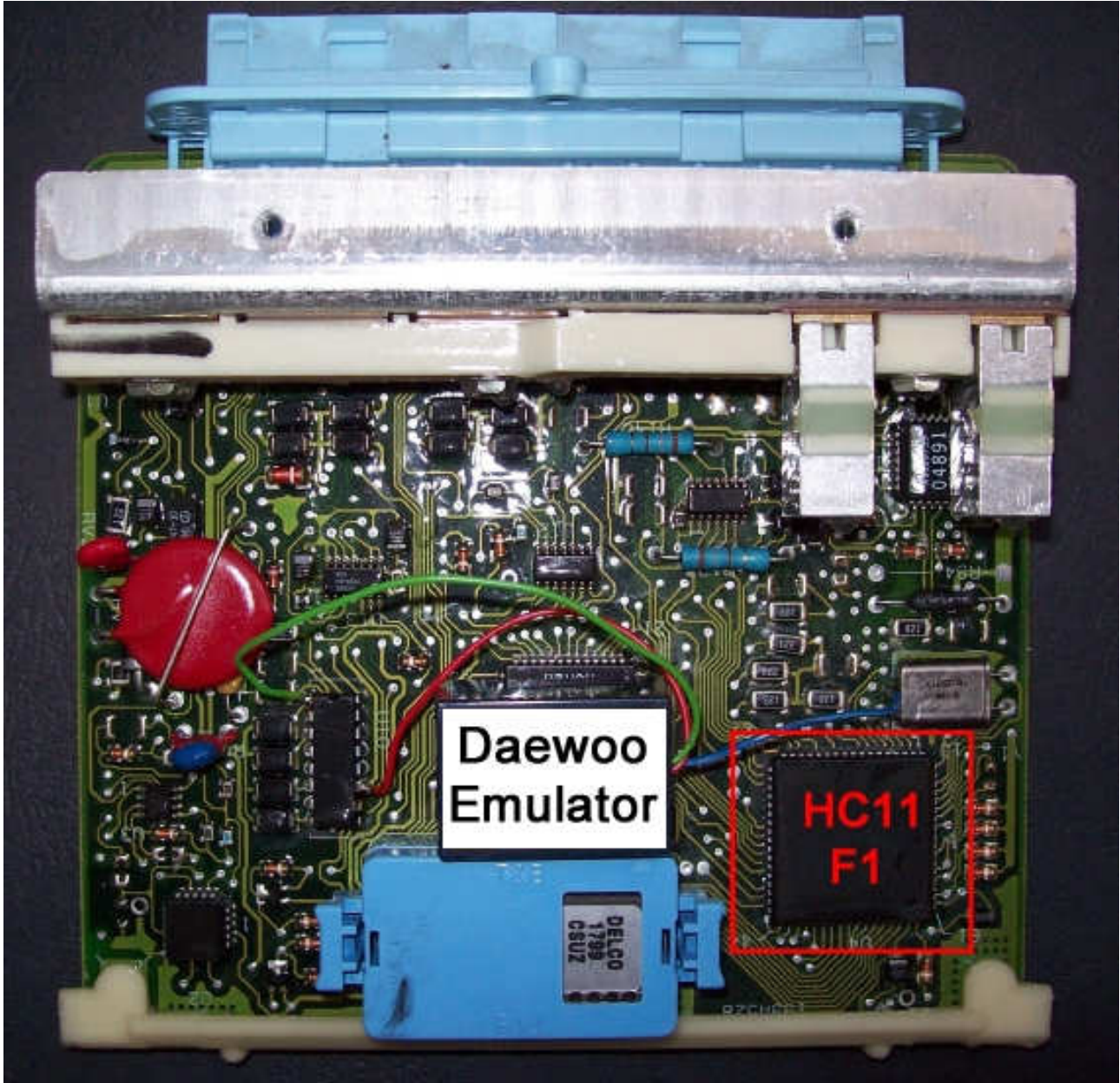
After processing Motorola, connect emulator to the driver as pictured.

Before connecting the emulator there is a necessity to take off the original immobilizer!!!

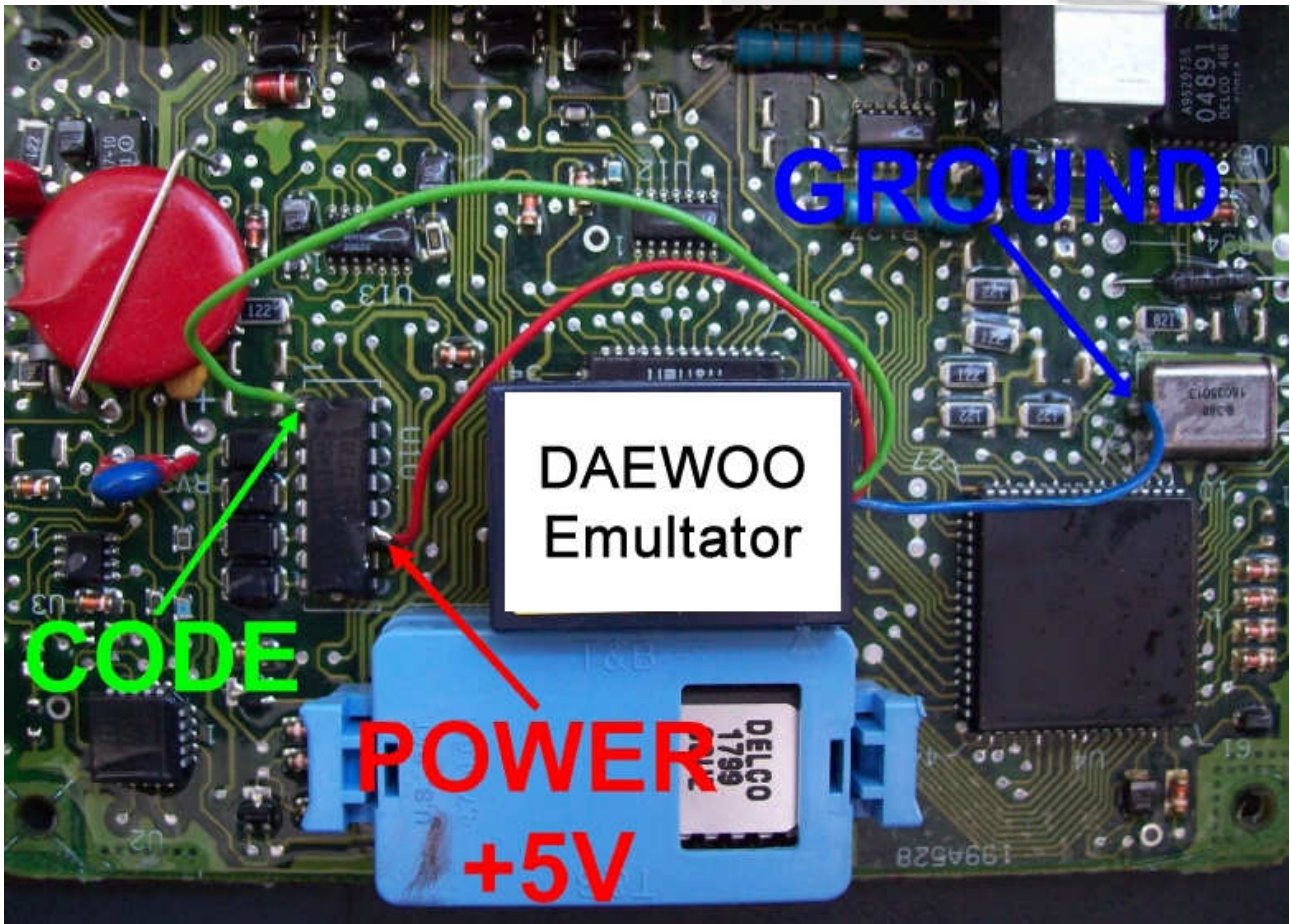
**In case when delay needed to start the car again is more than 10seconds to then change constant supply (+ 12V) on power after the ignition (+12V ACC).**



**ECM with blue plugs**



- 1) Run the reading of the Motorola MCU HC11F1**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



After processing Motorola, connect emulator to the driver as pictured.

**Ground** - ground of resonator (quartz)

**Code** - 1 leg of unit DELCO 9621

**Power** - 11 leg of unit DELCO 9621

**Unhook immo or cut off pin B7 from the Engine Control Module.**

Before connecting the driver, emulator must be precisely isolated by the isolation strap.

Before connecting the emulator there is a necessity to take off the original immobilizer!!!

**In case when delay needed to start the car again is more than 10 seconds, the.n cut off constant supply (+12V) pin and in place of ot serve power from second position of the ignition (+12V ACC).**



## **FIAT, CITROEN, PEUGEOT WITHOUT CAN**

Fiat, Citroen, Peugeot Jtd with Immo ECM 2 plugs

Alfa, Lancia, Fiat, 1,9 Jtd 2,4 Jtd with Immo **ECM 5 plugs**

IAW49F - Fiat Bravo 1,6 16V

IAW 4AF - Fiat Seicento, Panda 1,1 8V

Lancia Kappa 2,0 16 V Turbo - 0 261 203 792

Lancia Kappa 2,0 20 V - 0 261 203 670

Lancia Kappa 2,4 16 V - 0 261 203 669

Emulator immo to cars Alfa, Lancia, Citroen, Fiat, Peugeot replaces damaged immobilizer or the car key.

It function after made changes in memory content of Engine Control Module ECM or it self-learning a computer code.

Before installing emulator, disconnect original immo – then the key on the board will be off (it won't lit).

In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service.

Due to a low cost, you can leave it in the car, instead of buying a new immo or making car keys duplicate.

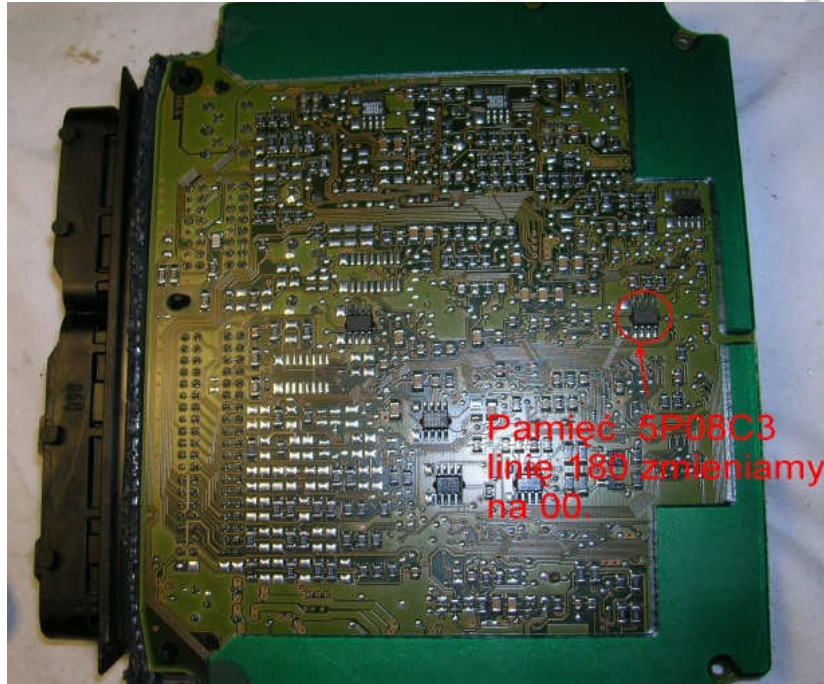
There is a possibility of using it as the additional security!!!

Two LEDs indicating:

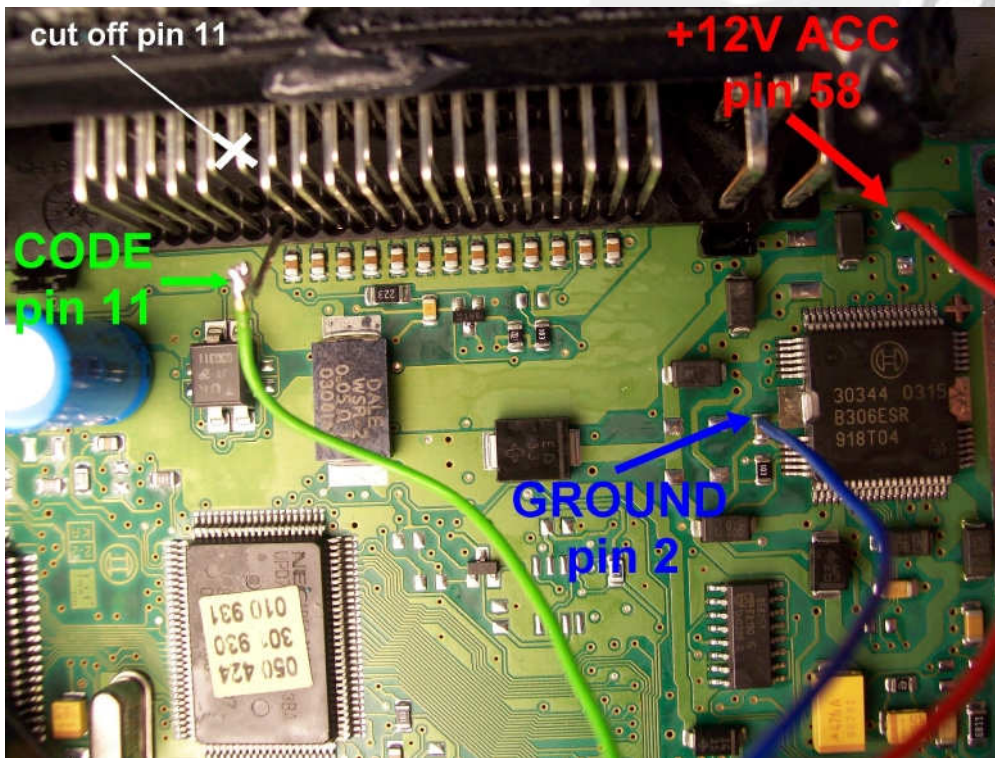
**Green** - power

**Red** - transmission (after adjusting it blinks each 2 seconds).

**Fiat, Citroen, Peugeot Jtd with Immo ECM 2 plugs**



- 1) Run the reading of the EPROM 5P08C3**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



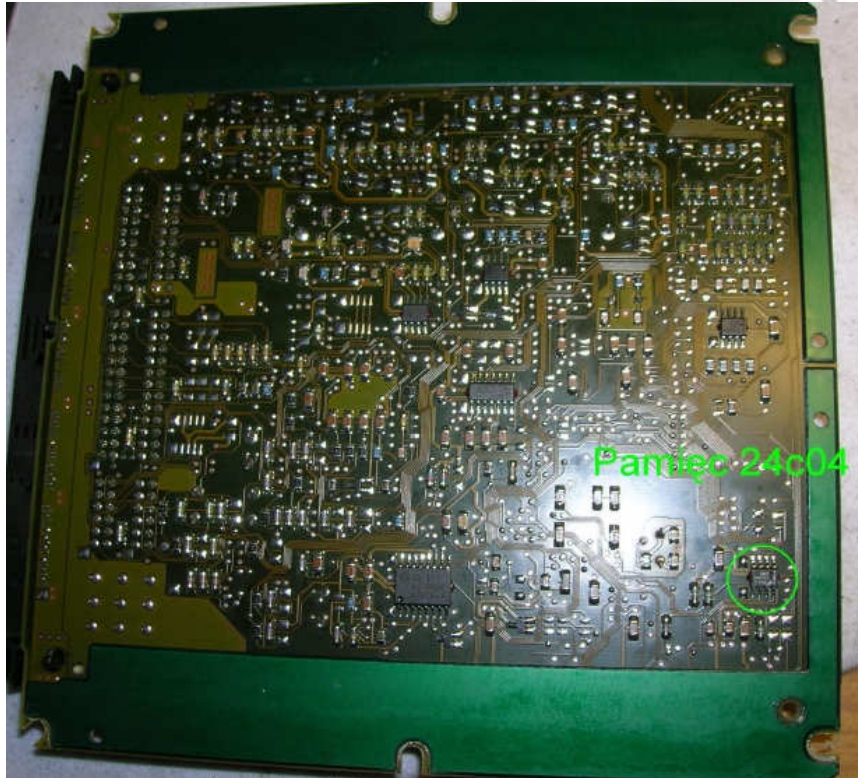
Connecting emulator To ECM:

**GND** - pin 1 or 2 or 3

**ACC** - pin 4 or 5

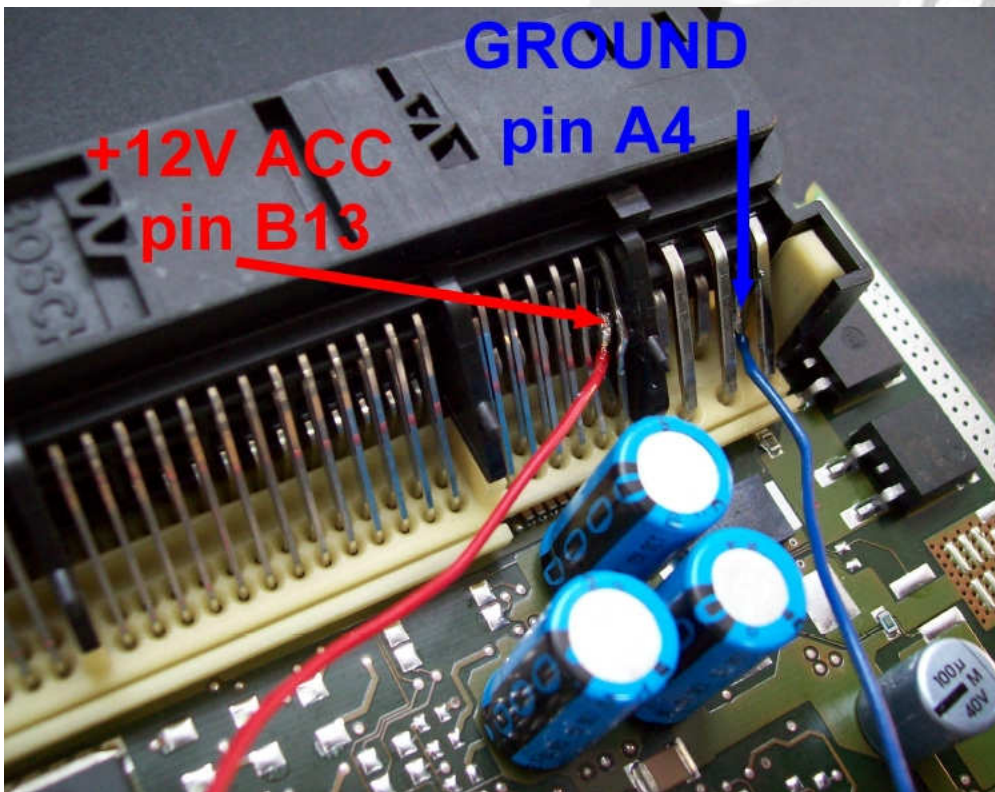
**Immo line** - pin 11

**Alfa, Lancia, Fiat, 1,9 JTD 2,4 JTD with Immo ECM 5 plugs**



- 1) Run the reading of the EPROM 24C04**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**





**GND** - pin A. 4,5,6

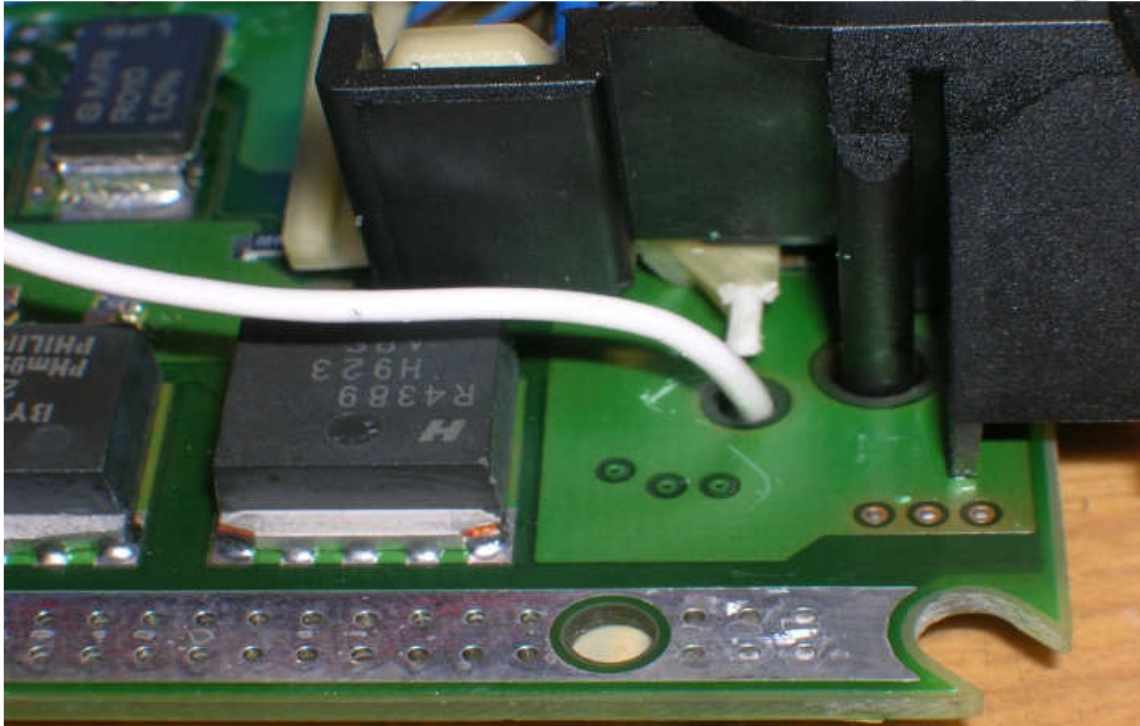
**ACC** - pin B. 13

**Immo line** - pin C. 13 **(CUT OFF)**

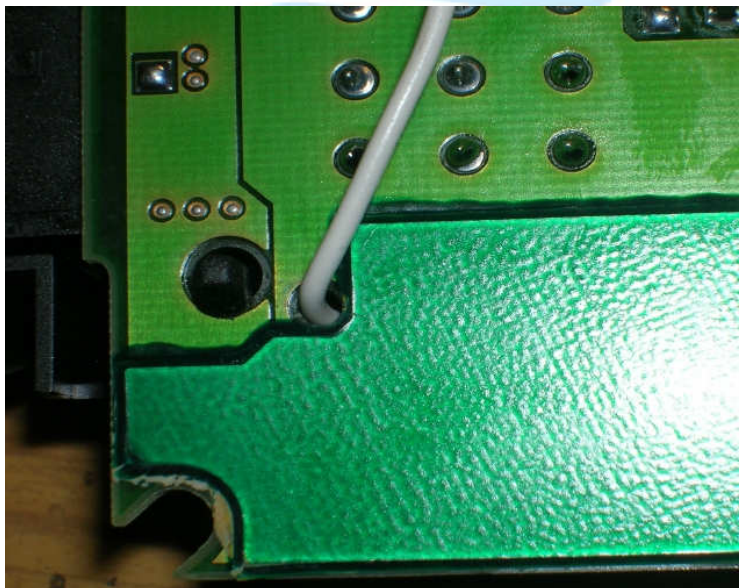


**ATTENTION!**

**When connecting ECM put a piece of cardboard on the wire and do not tighten firmly in this place.**



**Or break a piece of bracket and drag cable to the other side.**



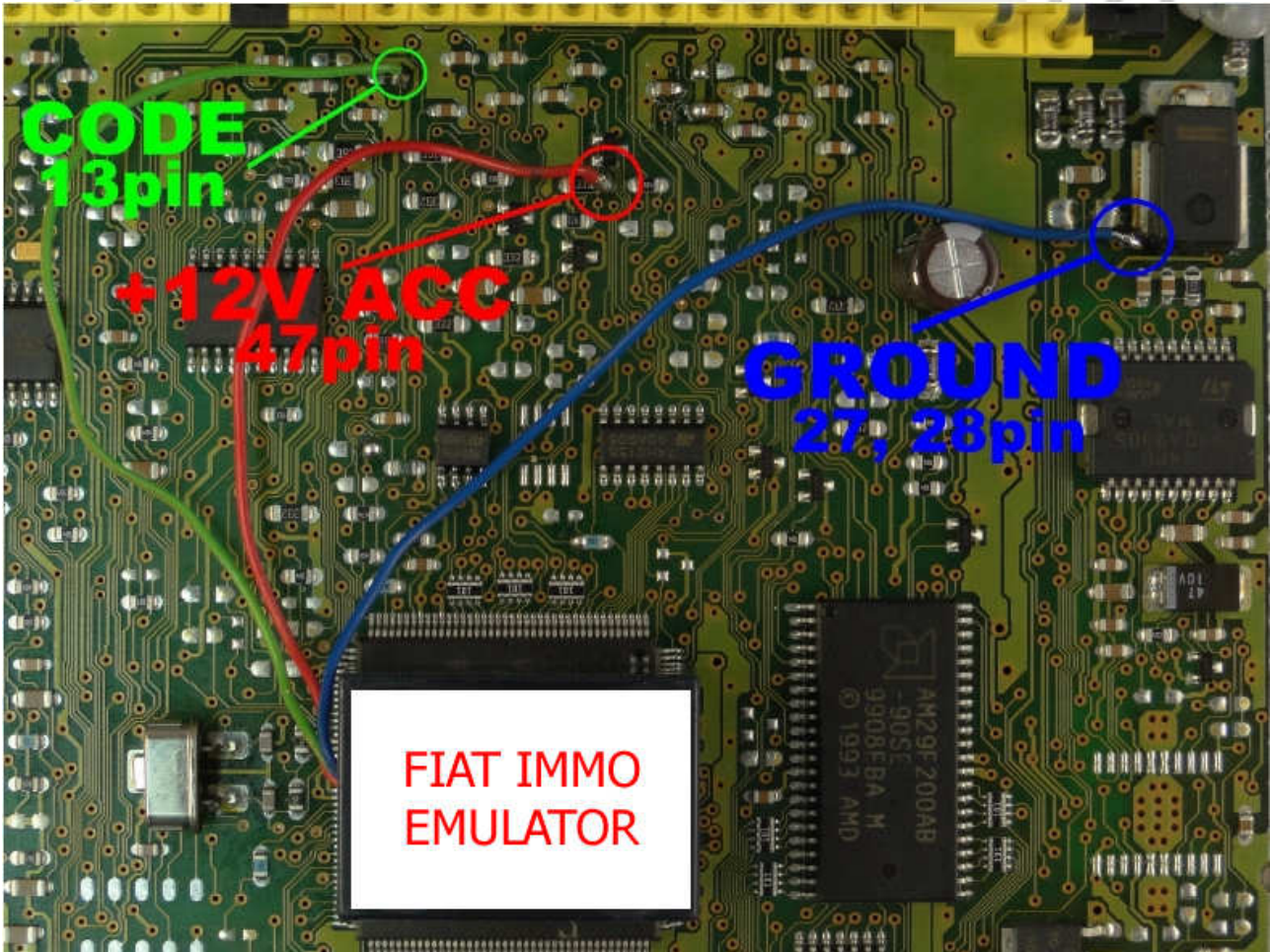


**IAW49F - Fiat Bravo 1,6 16V**



- 1) Run the reading of the EPROM 95040**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**





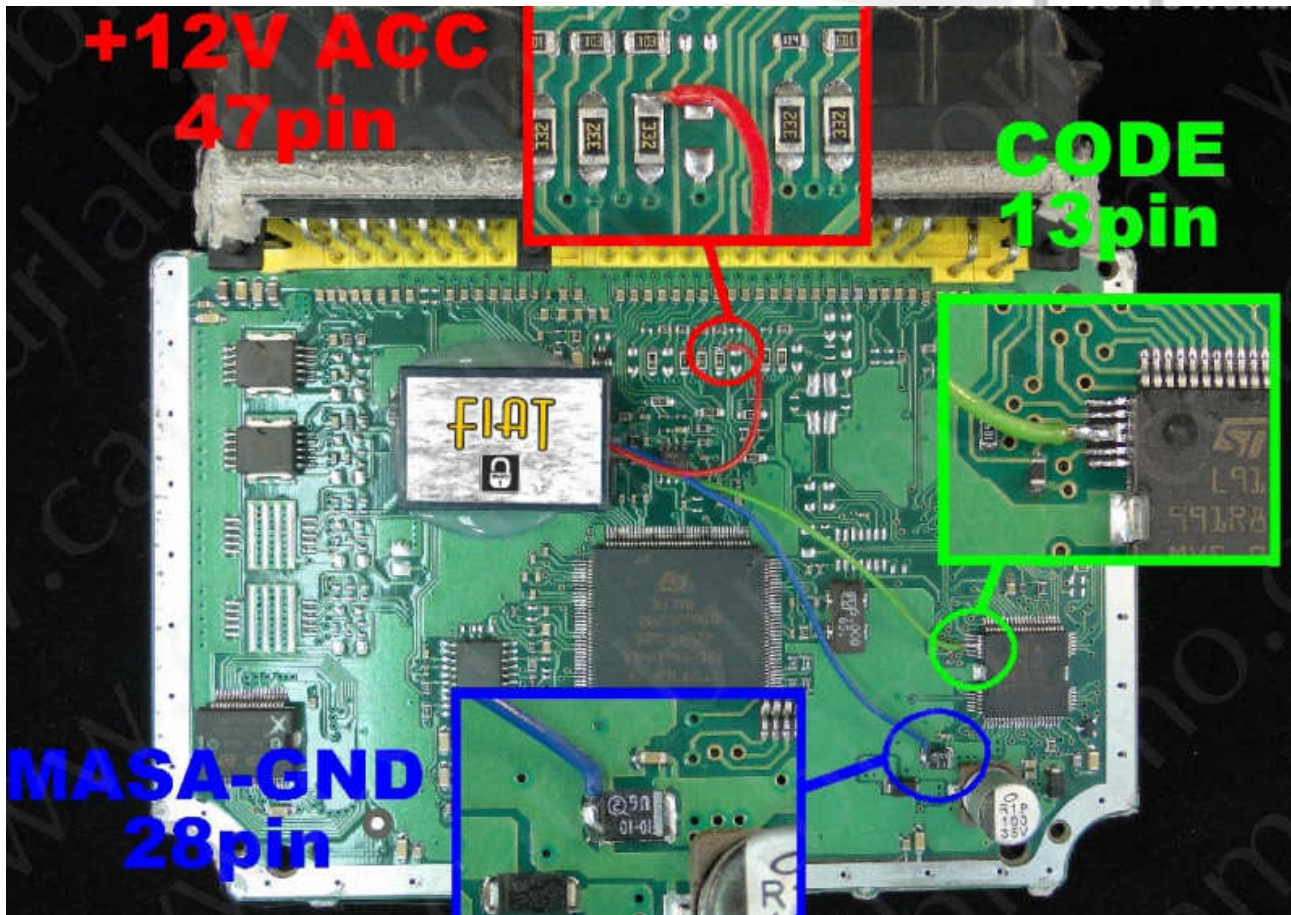
Connecting emulator to ECM:

**GND** - pin 27, 28

**ACC** - pin 47

**Immo line** - pin 13 **(CUT OFF)**

**IAW 4AF - Fiat Seicento, Panda 1,1 8V**



Connecting emulator to ECM:

**GND** - pin 27 or 28

**ACC** - pin 47

**Immo line** - pin 13 **(CUT OFF)**





- 1) Run the reading of the EPROM 95160**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**

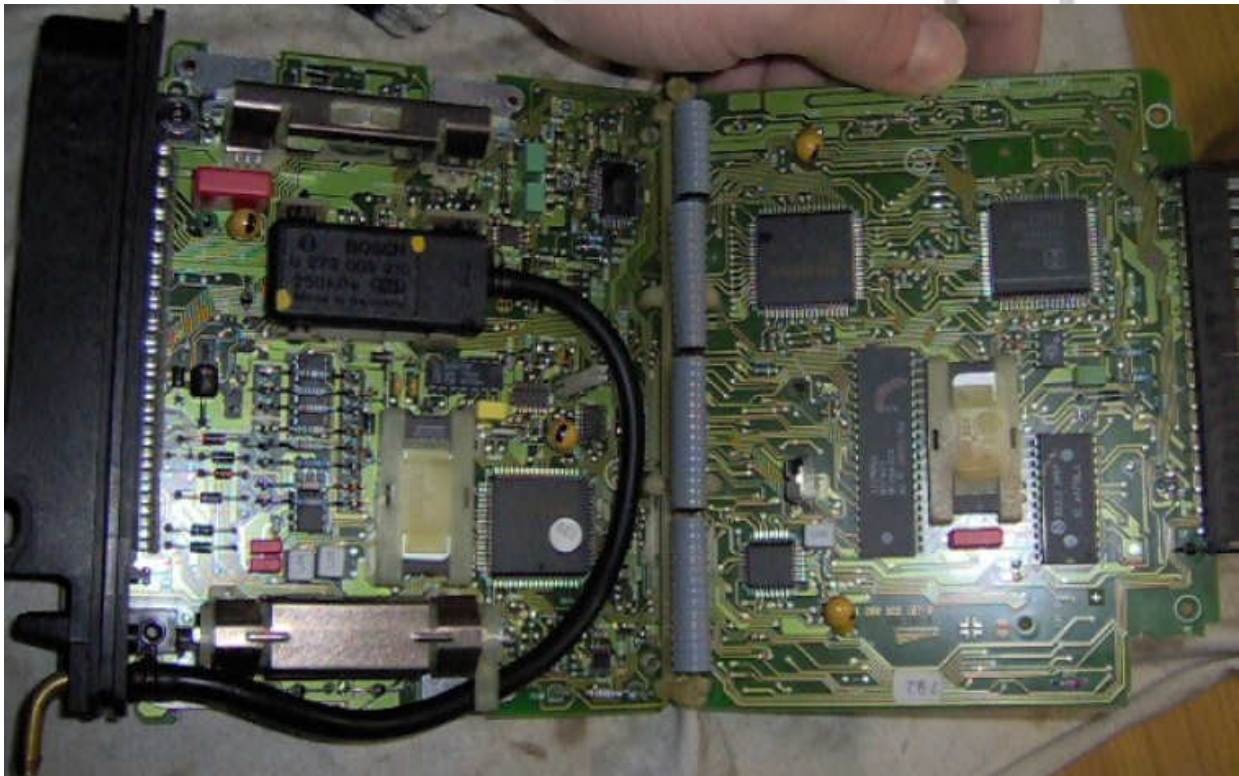


**Lancia Kappa 2,0 16 V Turbo - 0 261 203 792**



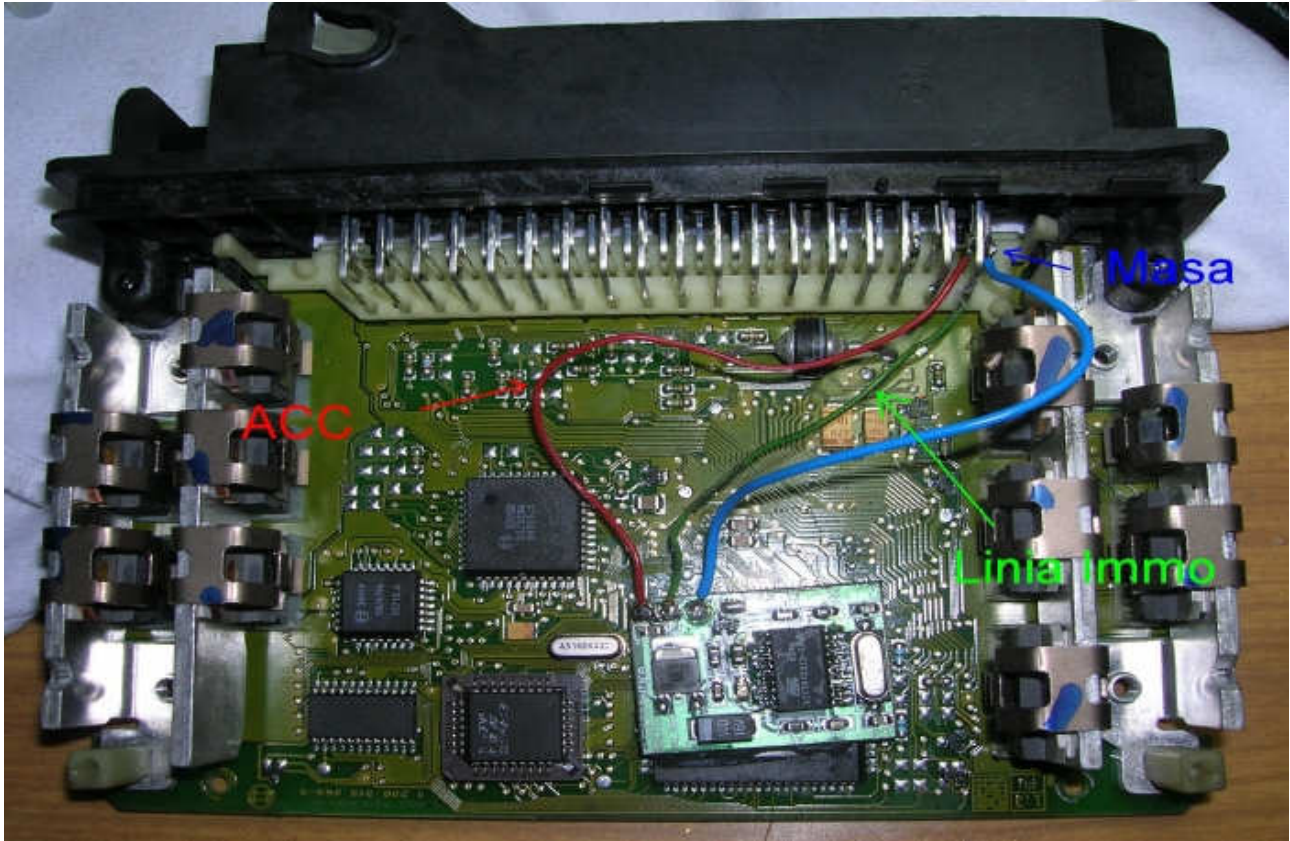
Connecting emulator;  
**GND** - pin 14,24 19  
**ACC** - pin 37 or 27  
**Immo line** - pin 55

**Device is self-learning a computer code.**



**→ Connect the immo line with pin 55. Disconnect IMMO.  
Connect together A6 and A5.**

To have a diagnosis, the immo line must be done at the reset button.



Connecting emulator:

**GND** - pin 2, 14, 19, 24

**ACC** - pin 27 or 37

**Immo line** - pin 55

**→ To have a diagnosis, the immo line must be done at the reset button. In immobilizer connect together A6 and A5.**

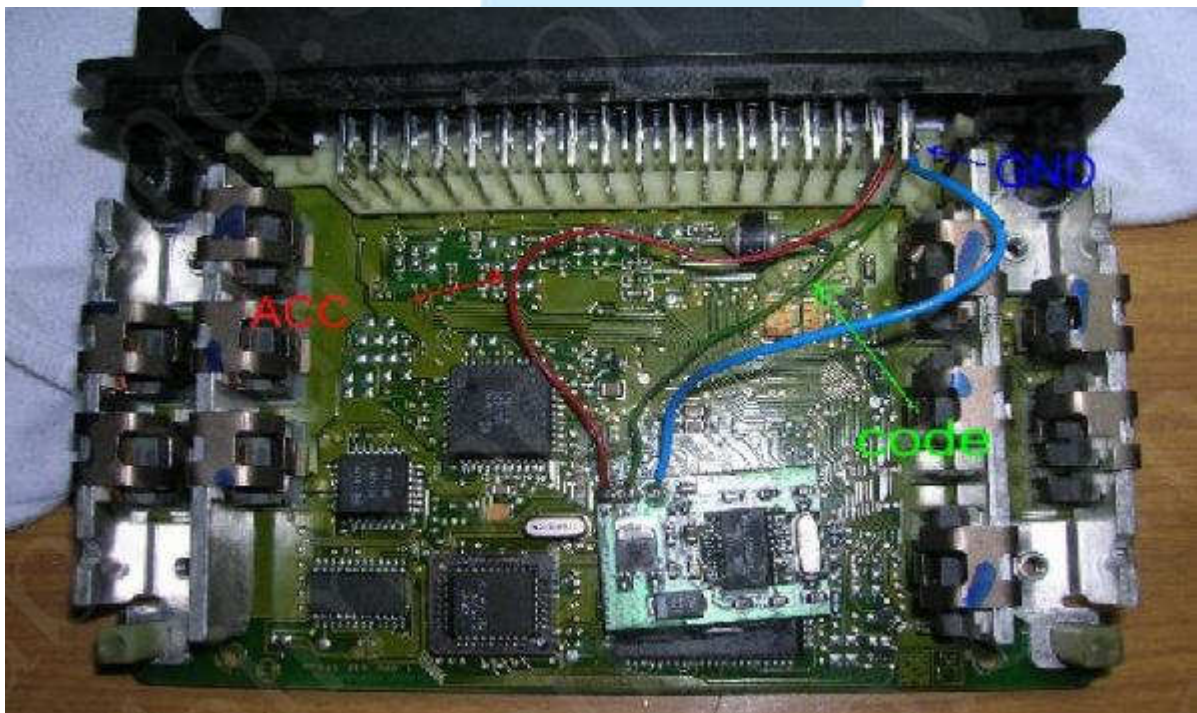
**Device is self-learning a computer code.**



**Lancia Kappa 2,4 16 V - 0 261 203 669**



**Device is self-learning a computer code.**





Connecting emulator:

**GND** - pin 19

**ACC** - pin 27

**Immo line** - pin 55

**→ Connect the immo with pin 55. Disconnect immo. Connect together A6 and A5.**

**To have a diagnosis, the immo line must be done at the reset button.**

## **KIA SPORTAGE 2,0 TD ENGINE CONTROL MODULE ZEXEL**

Emulator immo to cars Kia, Mazda replaces damaged immobilizer or car remote control.

This device is self-learning a computer code – just connect it and it already works.

In case of losing car remote control or a car burglary, it enable to drive off from the road to the car service.

Due to a low cost, you can leave it in the car, instead of buying a new immo or making car keys duplicate.

There is a possibility of using it as the additional security!!!

Two LEDs indicating:

**Green** - power

**Red** - transmission (after adjusting it blinks each 5 seconds).

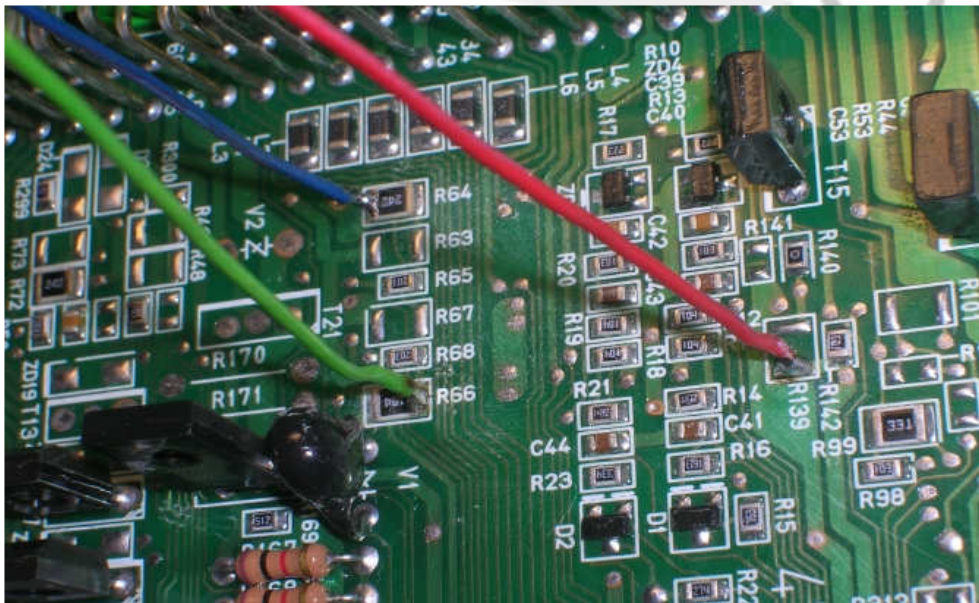
### **KIA SPORTAGE 2,0 Td**



Engine Control Module is placed in front on the passenger side, under carpet.



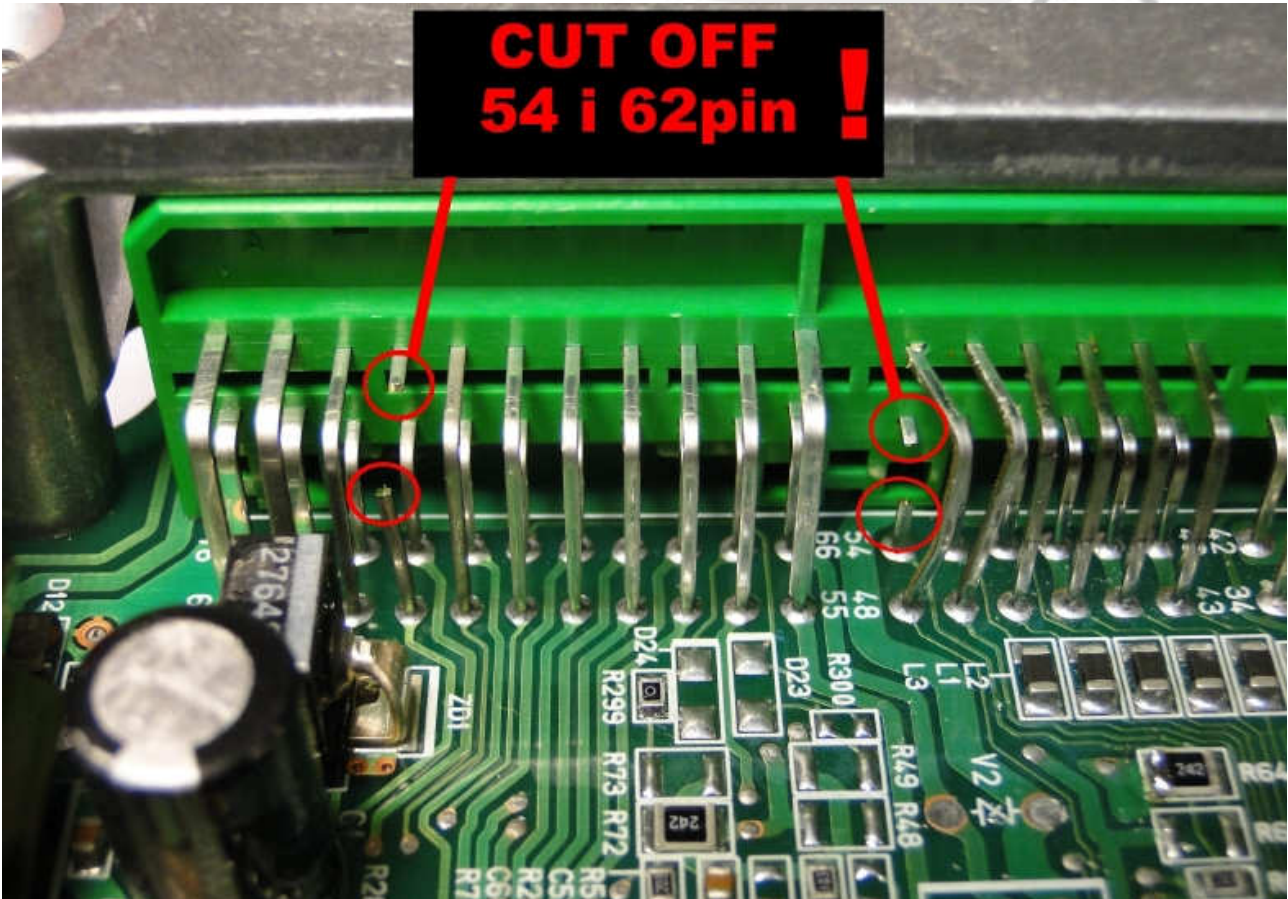
## ECMs ZEXEL



Connecting emulator to the Engine Control Module.



→ Cut off from wire pin 54 and 62



**Ground** - blue  
**Power supply** - red  
**Immo line** - green

Before connecting the driver, emulator must be precisely isolated with the isolation strap.

## **MATIZ, TACUMA AND LANOS 1,4 HYBRID**

Emulator immo to cars Matiz, Tacuma, Lanos replaces damaged immobilizer or the card key.

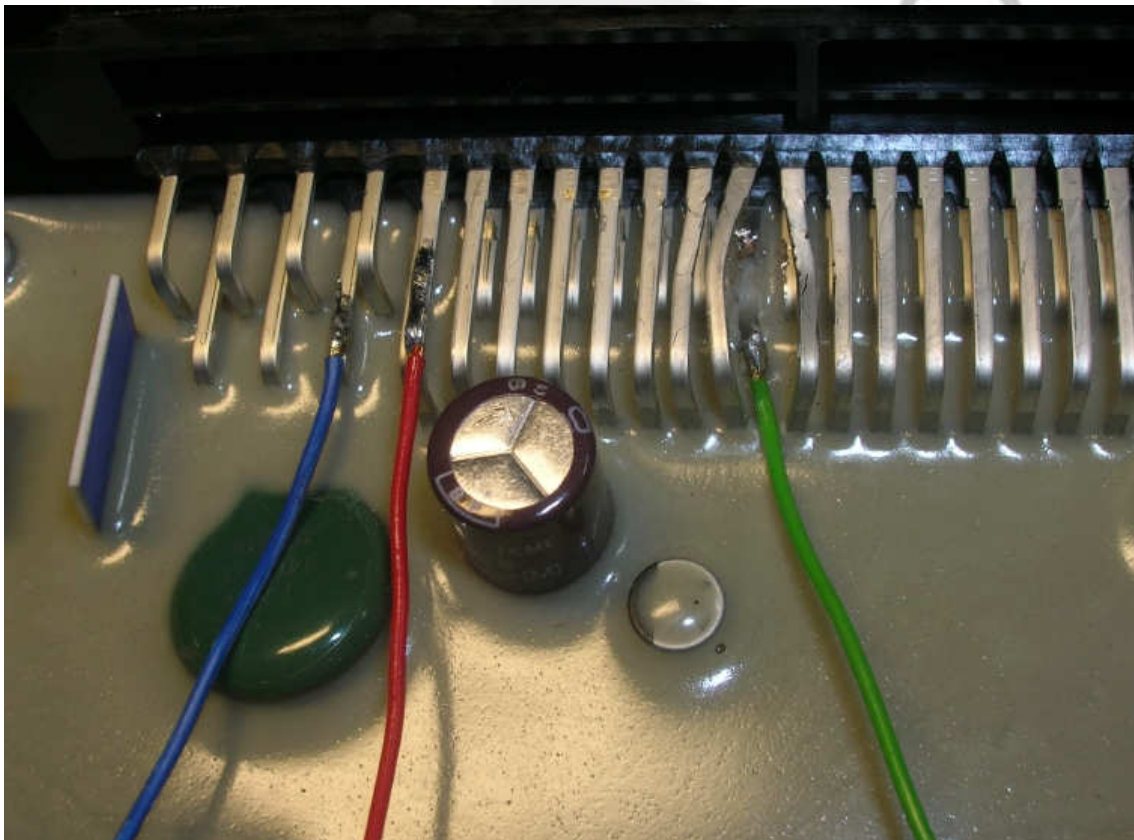
This device is self-learning a computer code – just connect it and it already works. In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service. Due to a low cost you can leave it in the car instead of buying a new immo or making car keys duplicate. There is a possibility of using it as the additional security!

Two LEDs indicating:

**Green** - power

**Red** - transmission (after adjusting it blinks each 5 seconds).

### **Matiz Engine Control Module SIEMENS**



Connecting emulator in ECM:

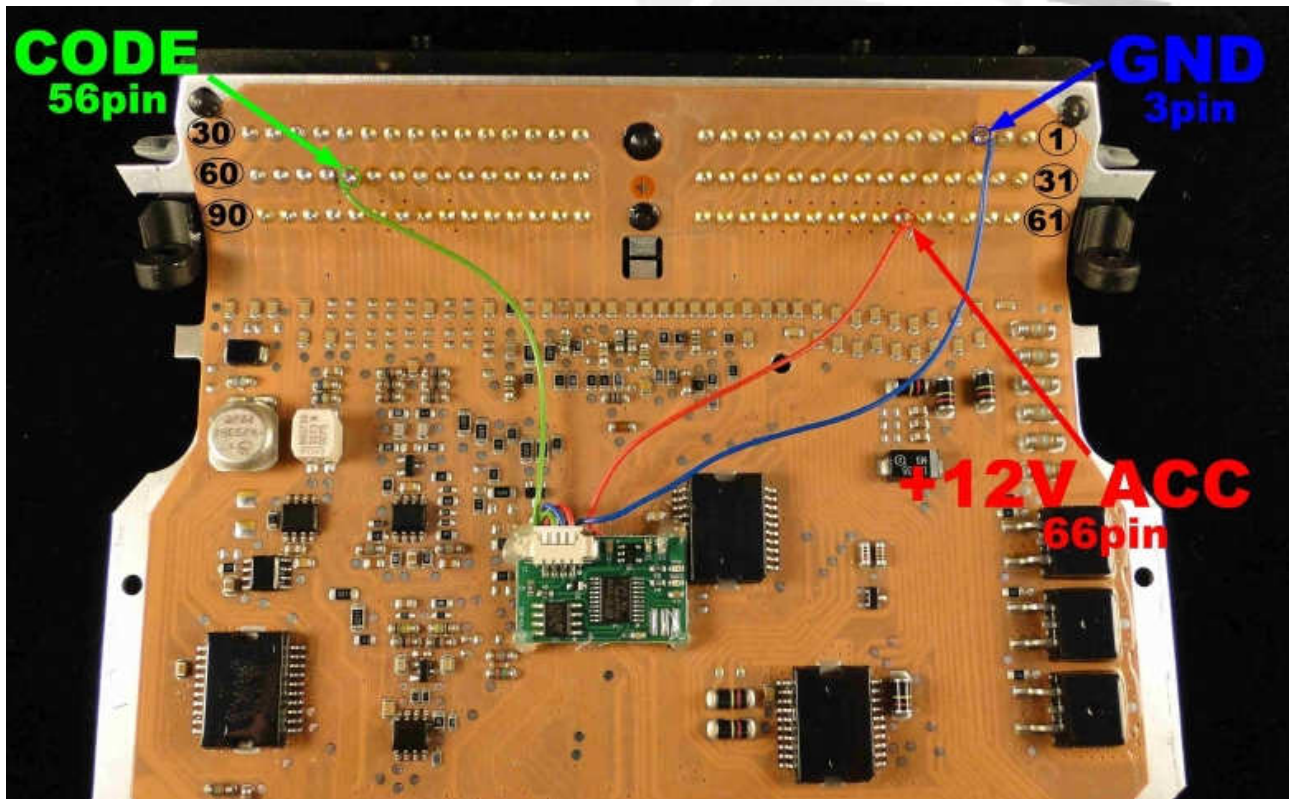
**GND** - pin 3

**Power** - pin 32

**Immo line** - pin 11

**→ Cut off pin 11 from wiring in the car !!!**

**Matiz Engine Control Module KEMSCO**



Connecting emulator in ECM:

**GND** - pin 3

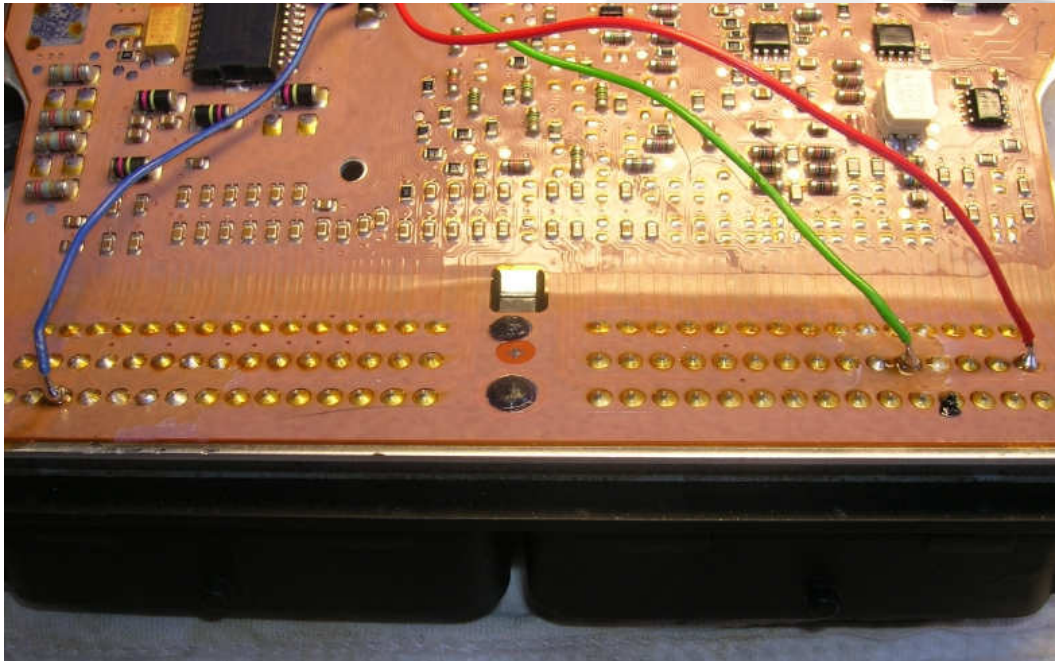
**Power** - pin 66

**Immo line** - pin 56

**→ Cut off pin 56 from wiring in the car !!!**



**Tacuma Engine Control Module KEMSCO**



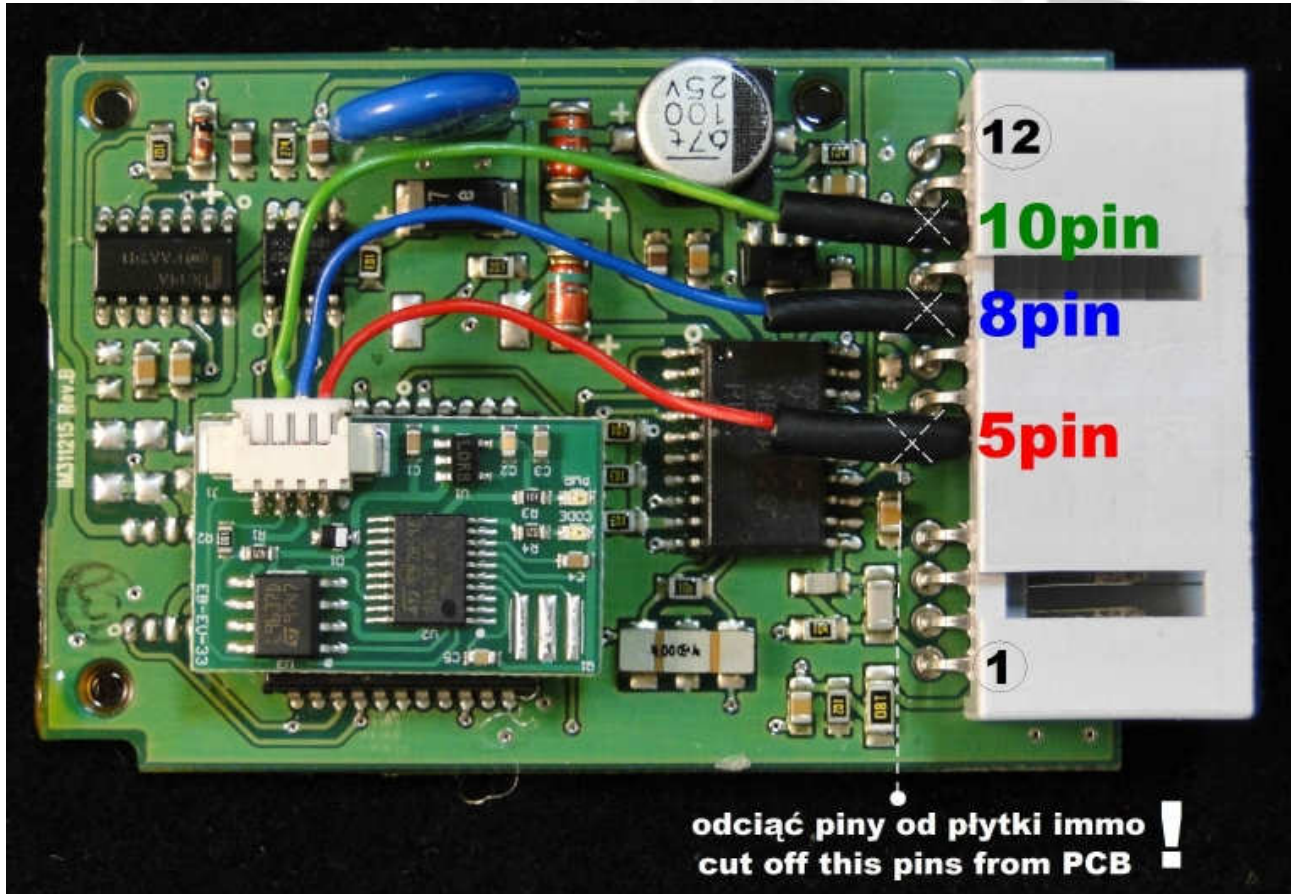
Connecting emulator in ECM:

**GND** - pin 3

**Power** - pin 60

**Immo line** - pin 56

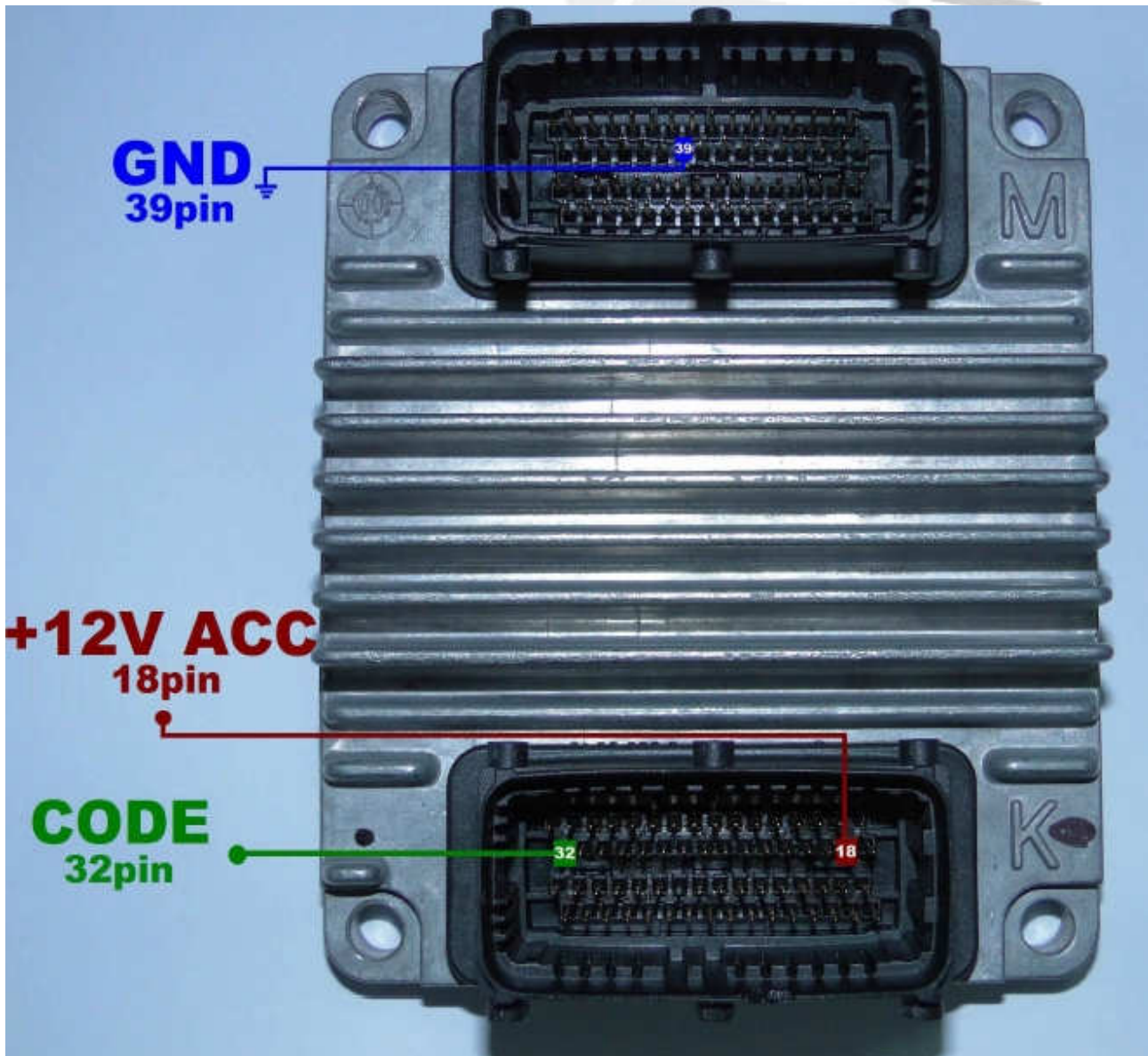
**→ Cut off pin 56 from wiring in the car !!!**



**Connect emulator to a plug of disconnected immobilizer:**

**GND** - pin 8  
**Power** - pin 5  
**Immo line** - pin 10

Or to plug EMC:  
for DOHC 2000cc 16V or Lanos OHC 1400cc



**+12V ACC** – 18pin (K)  
**GND** – 39 (M)  
**immo pin 32 in K plug** - brown cable

**→ CUT OFF PIN 32 from wiring in the CAR**

Before connecting the driver, emulator must be precisely isolated by the isolation strap.



**Kalos Engine Control Module Sirius D42 1.2**



**Connect emulator:**

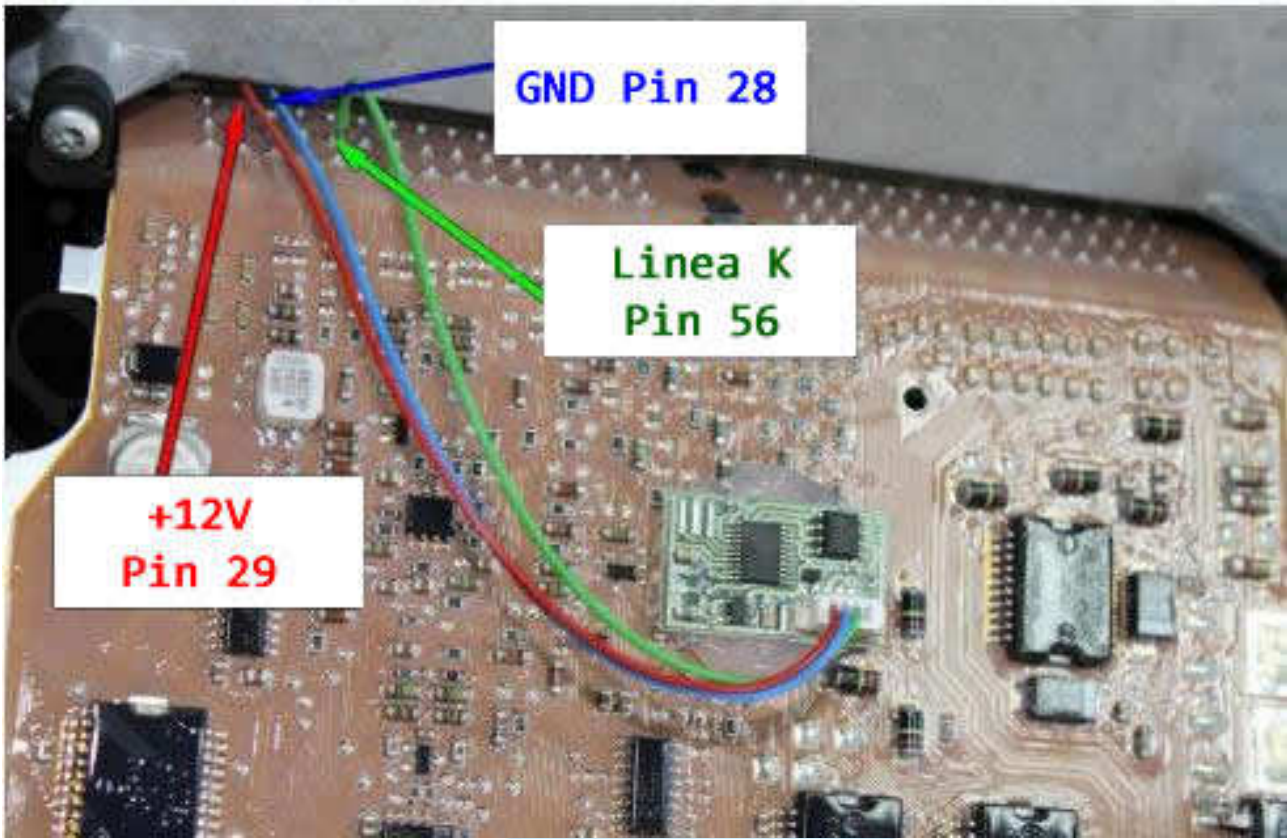
**GND** - pin 28

**Power** - pin 29

**Immo line** - pin 56

**→ CUT OFF PIN 56 from wiring in the CAR**

**Chevrolet Aveo Engine Control Module 4R 1.2 8V**



**Connect emulator:**

**GND** - pin 28

**Power** - pin 29

**Immo line** - pin 56

**→ CUT OFF PIN 56 from wiring in the CAR**

## **MERCEDES CR WITHOUT CAN**

Infrared immo, pyxis 12 pin + 2 pin CAN but only occupied L (H CAN empty) LEDs green and red are flashing in the mirror.

2,2 Diesel Lucas 1 plug

1,8 – 2,0 – 2,3 gasoline ECM hybrid SIEMENS

Emulator immo to Mercedes cars replaces damaged immobilizer or the car key.

This device is self-learning a computer code! In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service. Due to a low cost you can leave it in the car instead of buying a new immo or making car keys duplicate.

Two LEDs indicating:

**Green** - power

**Red** - transmission (after adjusting it blinks each 5 seconds)).

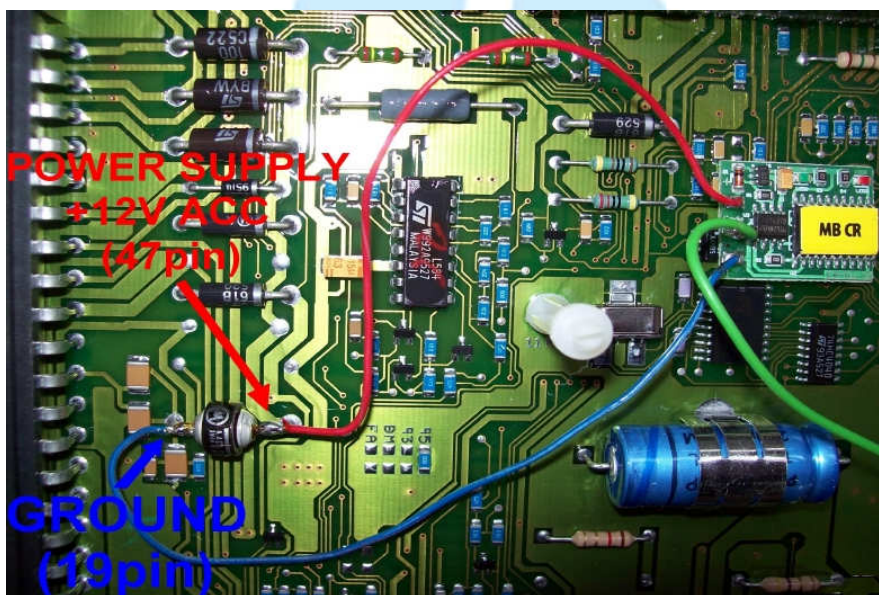
### **Mercedes E220 2,2 Diesel Lucas 1 plug.**

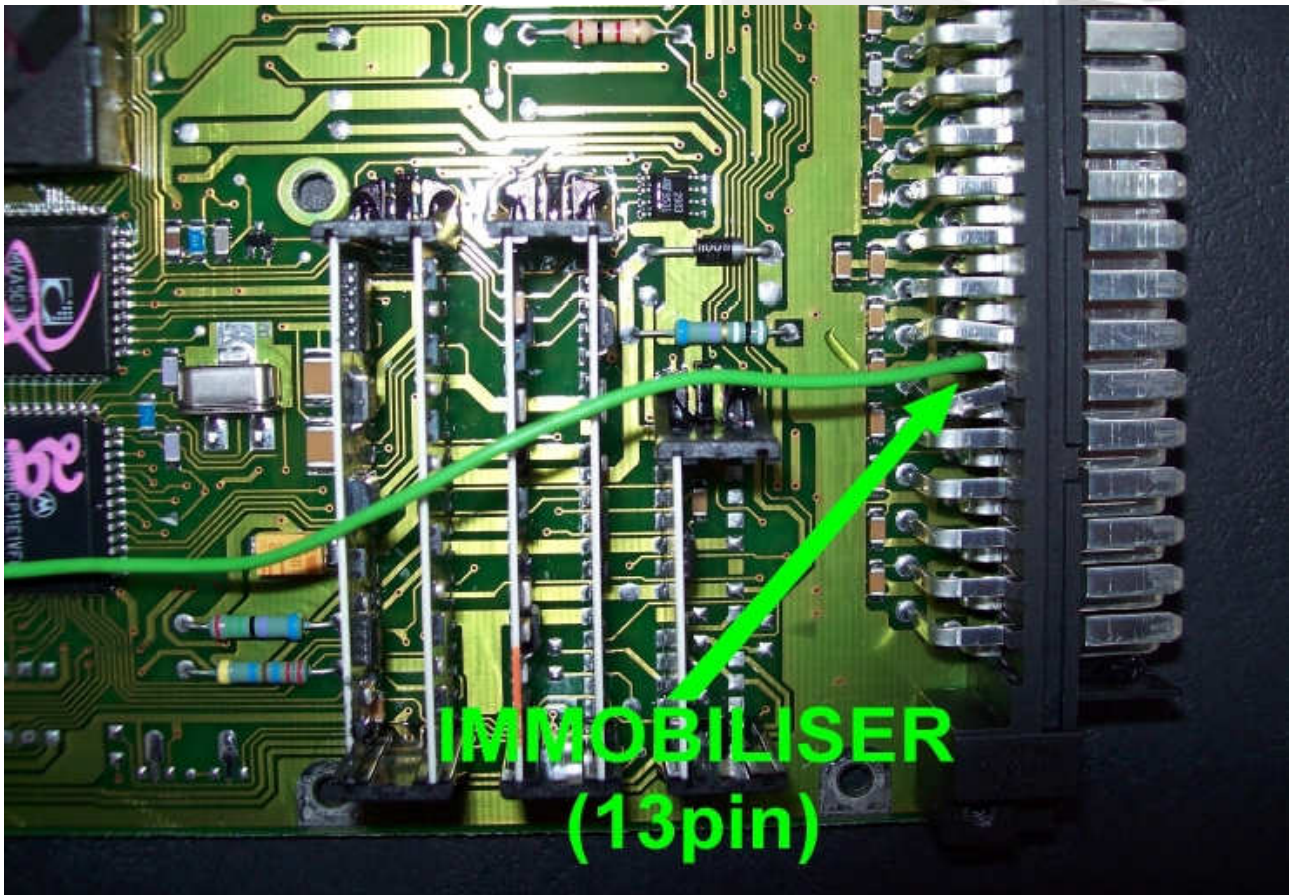






**ECM Lucas 1 plug 55 pins.**





Connecting emulator in ECM:

**GND** - pin 19

**ACC** - pin 47

**Immo pin** - 13 white with a green stripe

**→ Cut off pin 13 at the computer, and pins 5 and 6 at the immo pyxis. Connect emulator. LEDs at the mirror and at the door handle do not flashing.**



**Mercedes C 202 1,8 gasoline ECM hybrid SIEMENS 0185454132**



**Connect emulator instead of infrared immo, pyxis 12 pin + CAN 2 pin  
under the feet of passenger.**





**GND and ACC in 12 pin plug of immobilizer:**

**GND** - pin 1

**ACC** - pin 9

**Immo line** - green wire in two pin plug of immobilizer.

**→ Cut off 5 and 6 at immo pyxis, then LEDs do not blink at the mirror.**

**Mercedes Vito 2,0 and 2,3 gasoline ECM hybrid SIEMENS**

ECM 2 plugs with vacuum hose, pyxis immo 9 pin open and lock by remote control.

Connecting in place of original immobilizer:

**GND** - pin 2 brown

**ACC** - pin 7 black with grey strap

**Immo Line** - pin 5 blue with violet strap

## **MERCEDES CR1 WITH CAN OLDER**

Vito 2,2 Cdi **5 plugs**

A-Class 1,7 Cdi **5 plugs**

EDC/MSA - 2,5 Td 2,9 Td 3,0 Td 1 plug  
(with mechanical and electronic ignition switch)

**ECM Bosch with HC11E9** in vehicles with engines of 320-6 cylinders, 430-8 cylinders  
ML 320 and 2,0 gasoline SLK 1998 with mechanical ignition switch

**Lucas 4 plugs** - E-class, 2,2 diesel with mechanical and electronic ignition switch

A-Class **ECM VDO MSM** - 1,4 – 1,6 – 1,9 gasoline

Emulator immo to Mercedes replaces damaged immobilizer or the car key for the group of Mercedes cars.

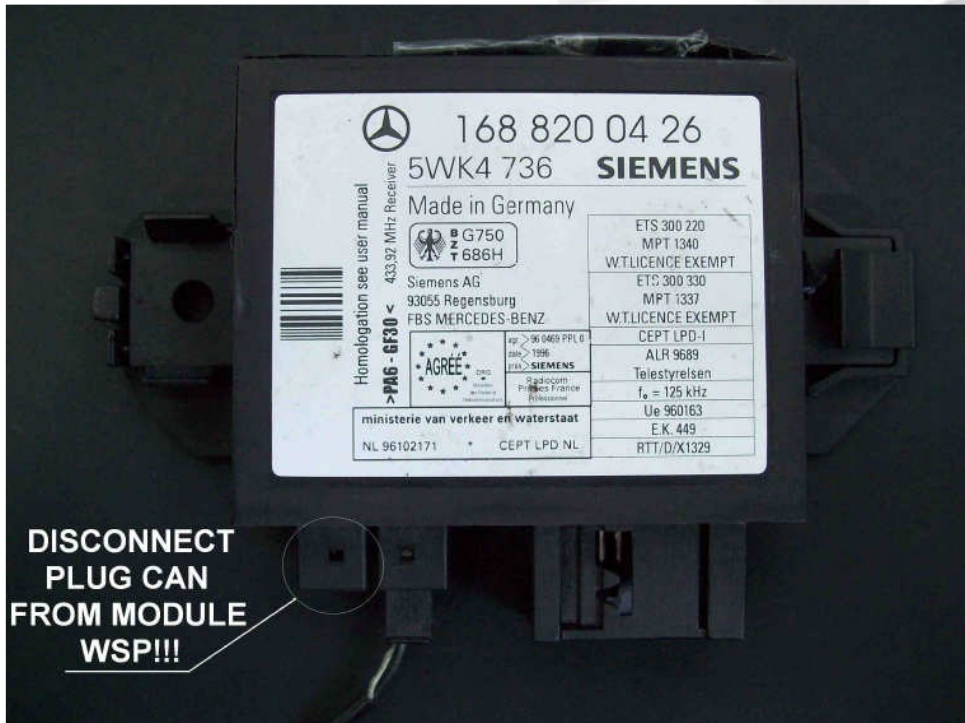
It function after made changes in memory content of Engine Control Module ECM.

In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service. Due to a low cost you can leave it in the car instead of buying a new immo or making car keys duplicate.

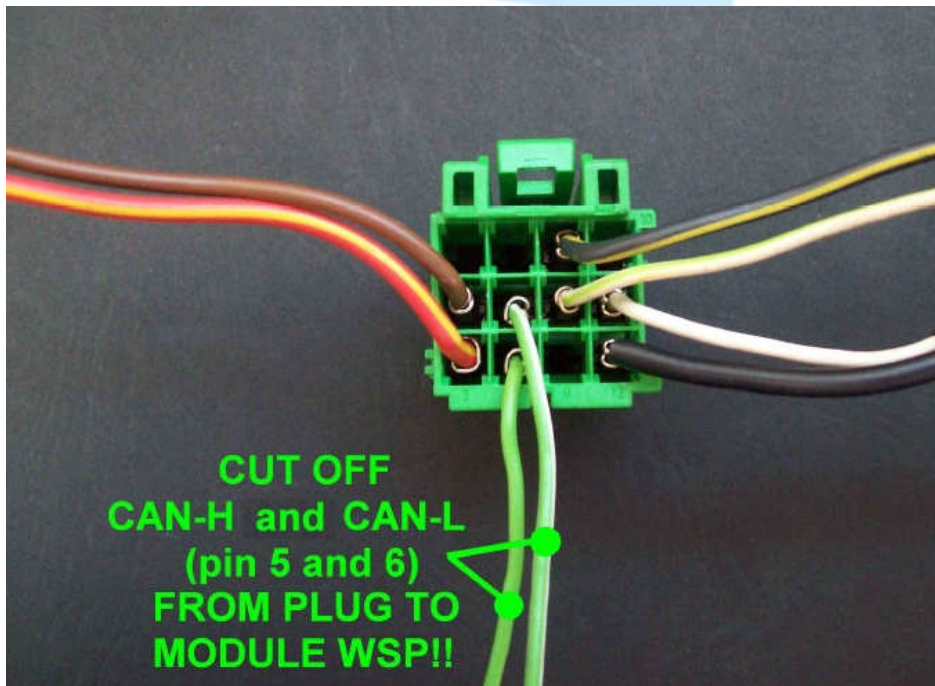
There is a possibility of using it as the additional security!!!

**Red LED indicating about transmission:  
will blink and turn off after properly working.**

→ **After install, disconnect CAN from original immo!**



- **A-class 1,7Cdi 5 plugs**



- **Vito 2,2 Cdi 5 plugs**



**Vito Cdi 5 plugs**

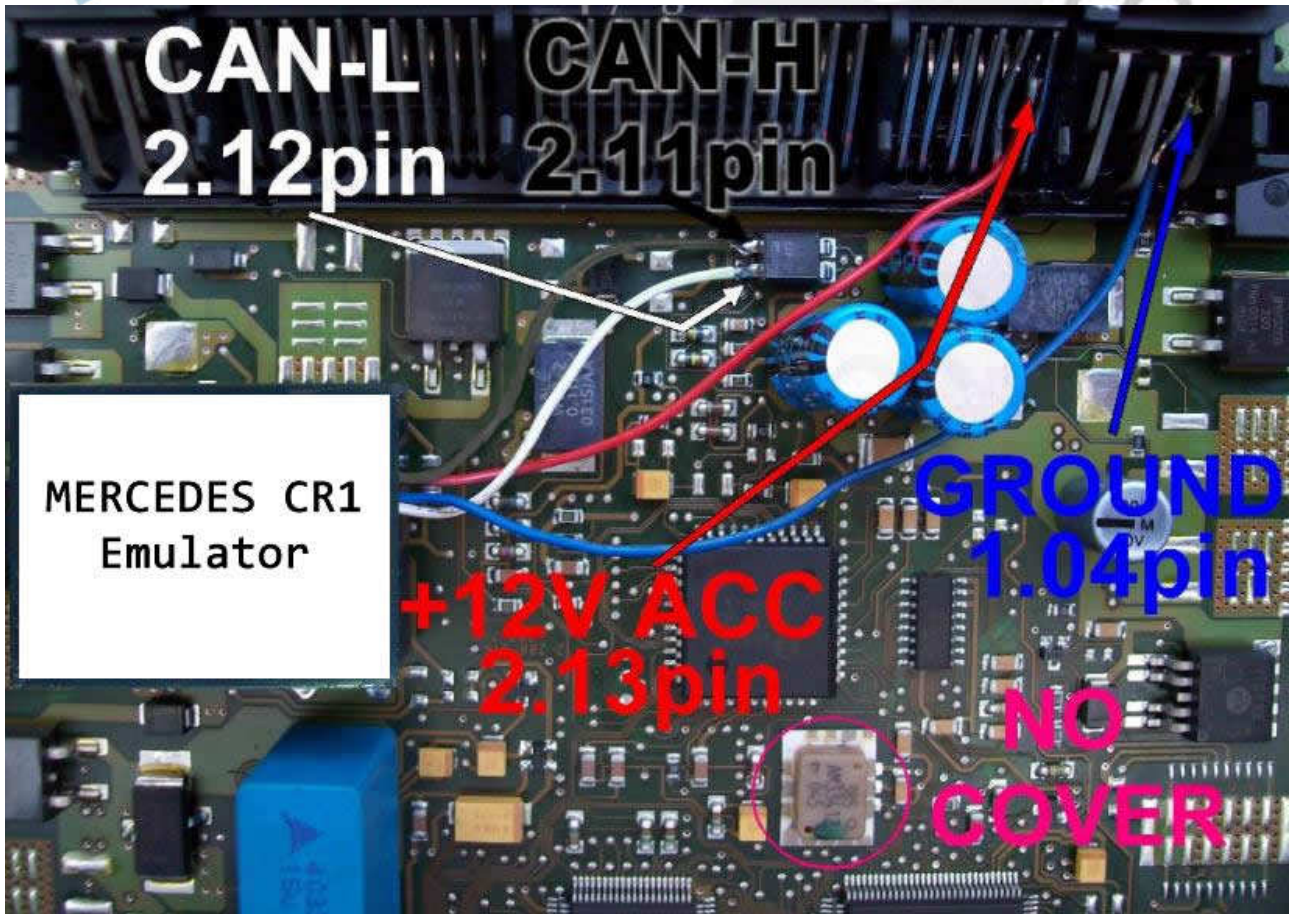


**Mercedes Vito 2,2 CDI the starter does not starting, there is an inscription at the instrument cluster "start error".**



**The driver is positioned at the passenger side.**

FEEL



Connecting emulator to ECM 5 plugs Vito:

**GND** - 1.04, 1.05, 1.06

**CAN-H** - 2.11

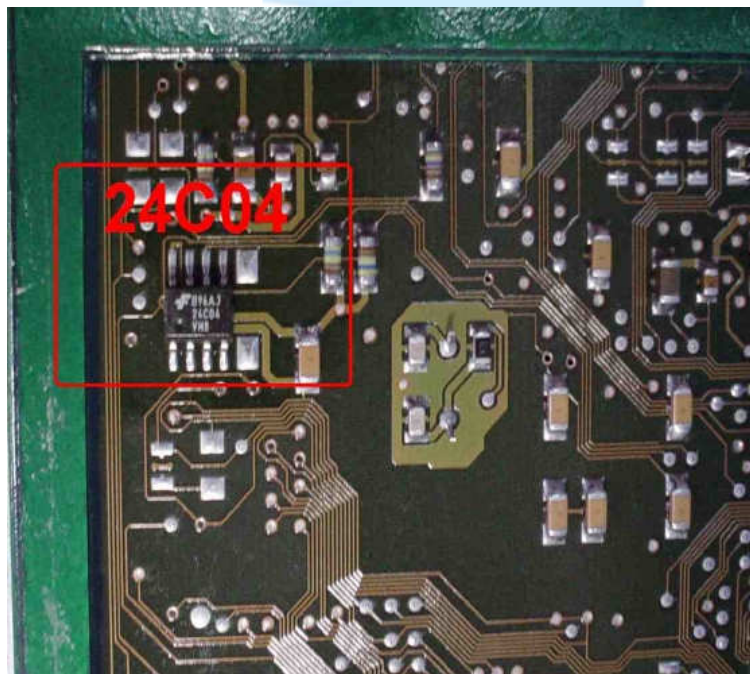
**CAN-L** - 2.12

**ACC** - 2.13





**In the ECM of Vito engine, 5 plugs CR1, find memory 24C04.**



- 1) Run the reading of the EPROM 24C04
- 2) Process the file with the software IMMO Universal Emulator
- 3) Write with the new file generated

**→ Disconnected CAN from WSP!!!**

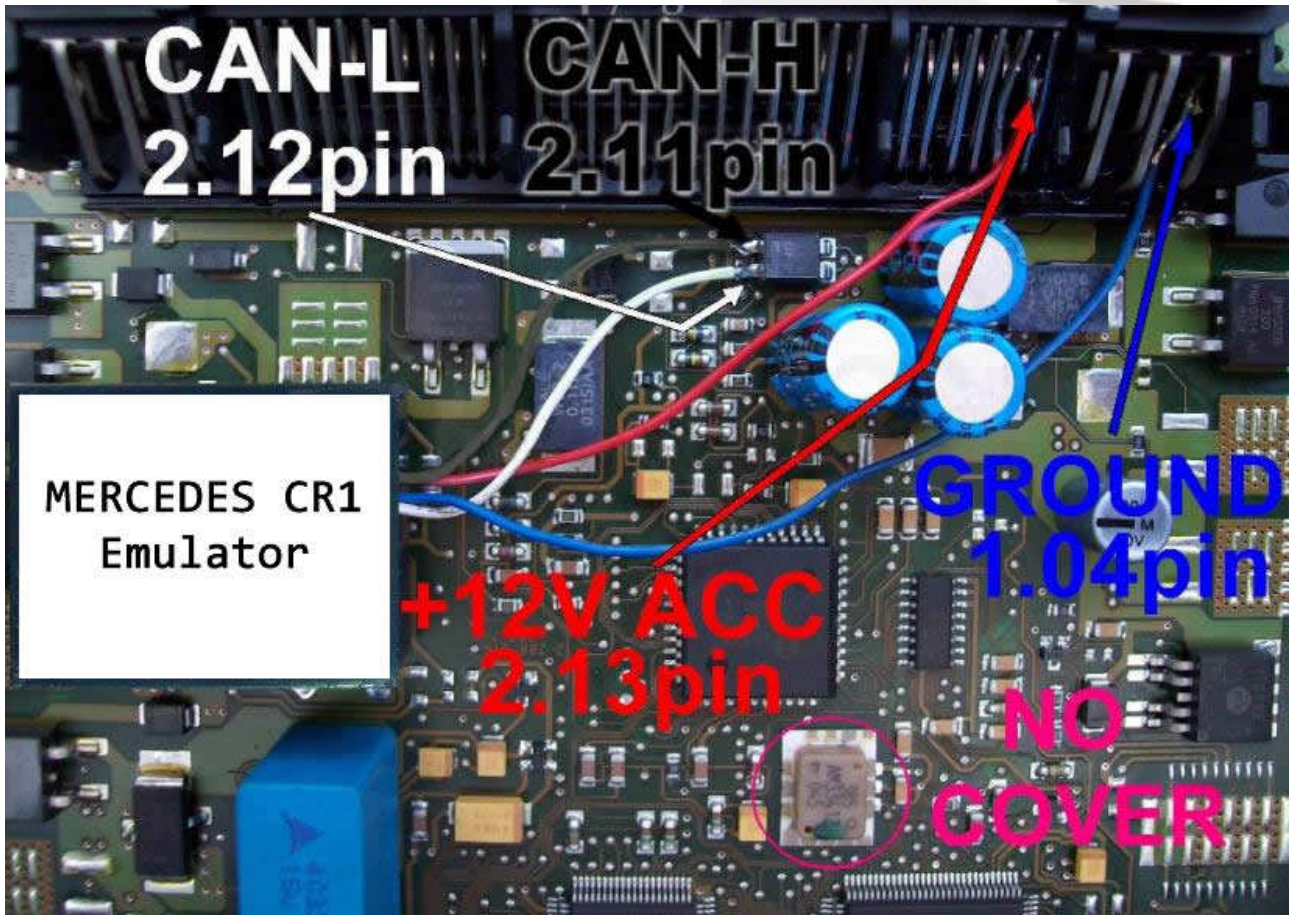
**A-Class 1,7 Cdi 5 plugs**



**Mercedes A-class 1,7 CDI the starter does not starting, there is an inscription at the instrument cluster "start error".**

ECM under bonnet on left the side behind engine, covered by plastic.





Connecting emulator to ECM5 plugs A-class:

**GND** - 1.04, 1.05, 1.06

**CAN-H** - 2.11

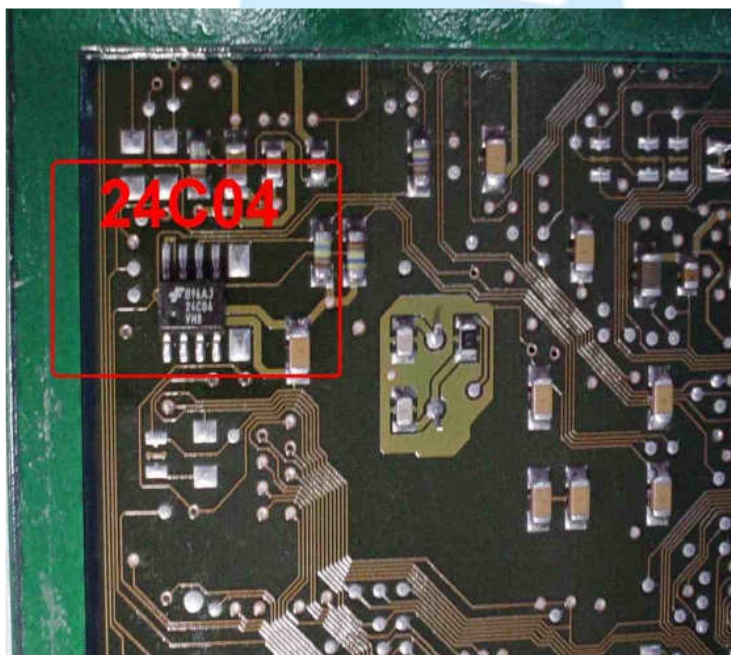
**CAN-L** - 2.12

**ACC** - 2.13





**In the A-class engine drivers, 5 plugs CR1 find memory 24c04.**

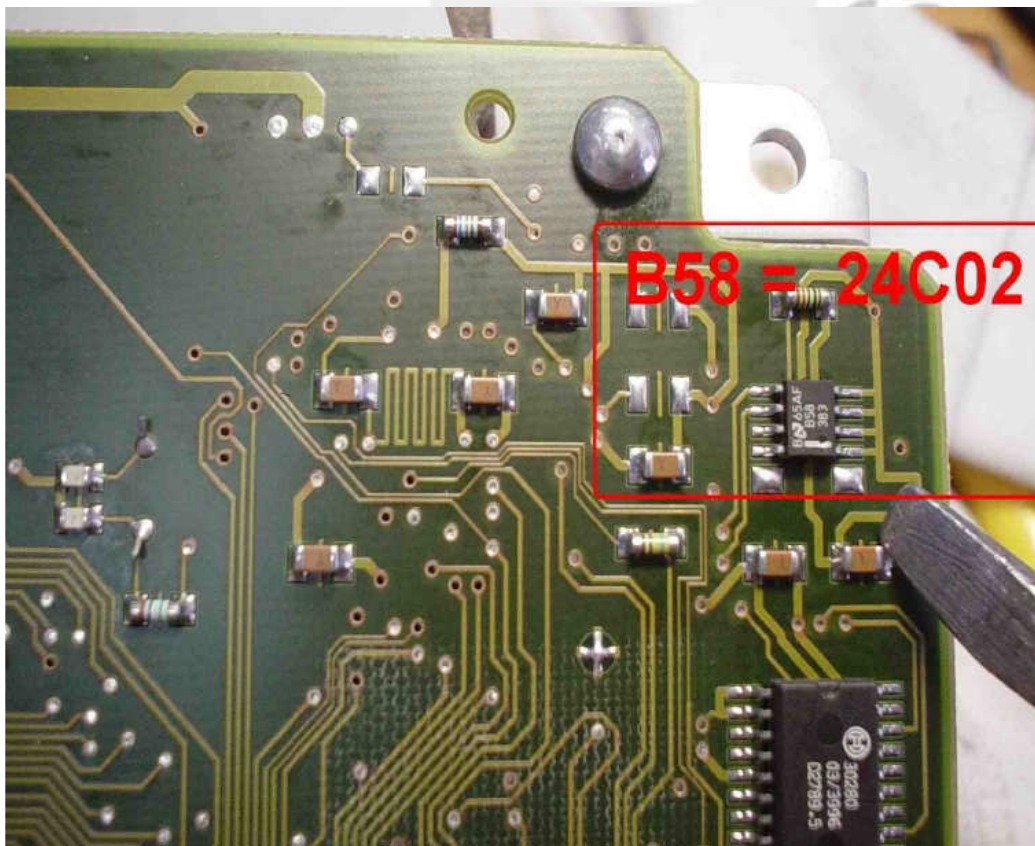


- 1) Run the reading of the EPROM 24C04
- 2) Process the file with the software IMMO Universal Emulator
- 3) Write with the new file generated

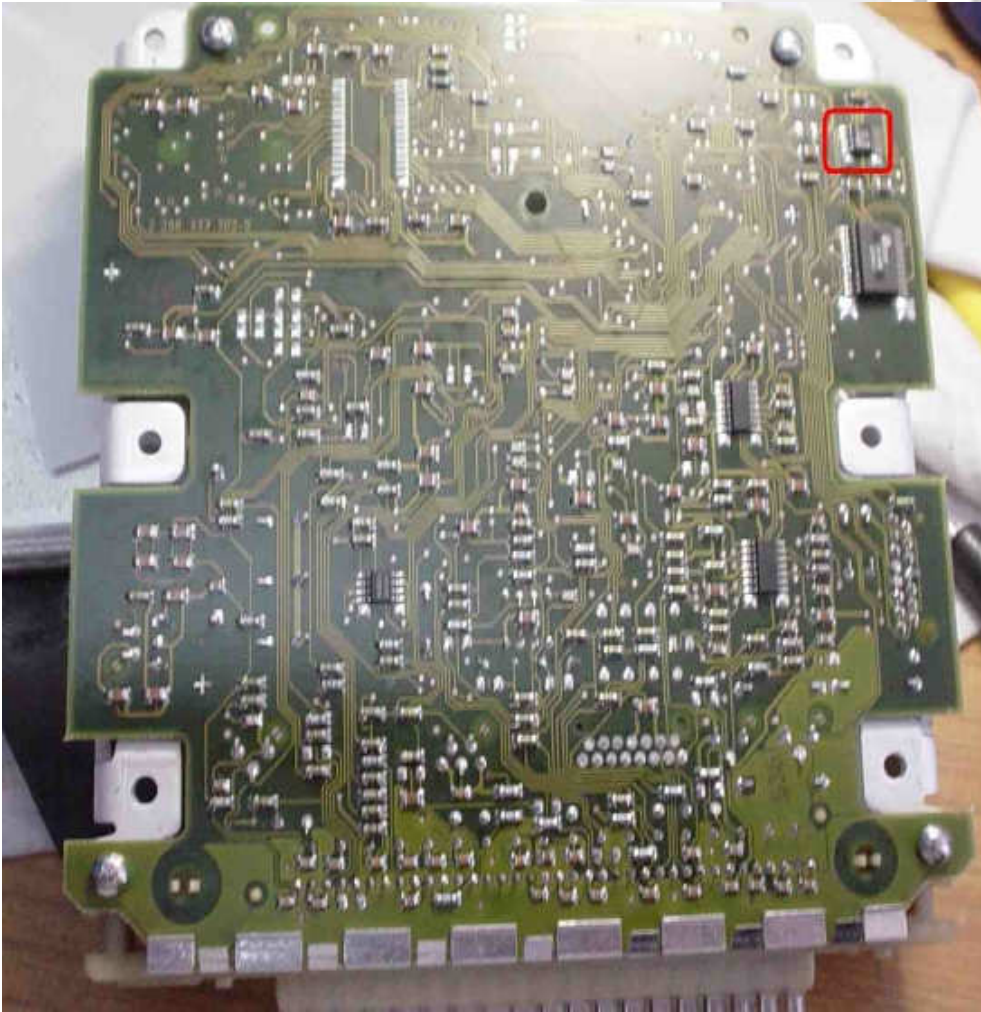
**→ Disconnected CAN from WSP!!!**

**ECD/MSA 2,5 Td 2,9 Td 3,0 Td (1 plug)**

- Sprinter 2,9 Td
- E210 3,0 Td
- C250 2,5 Td

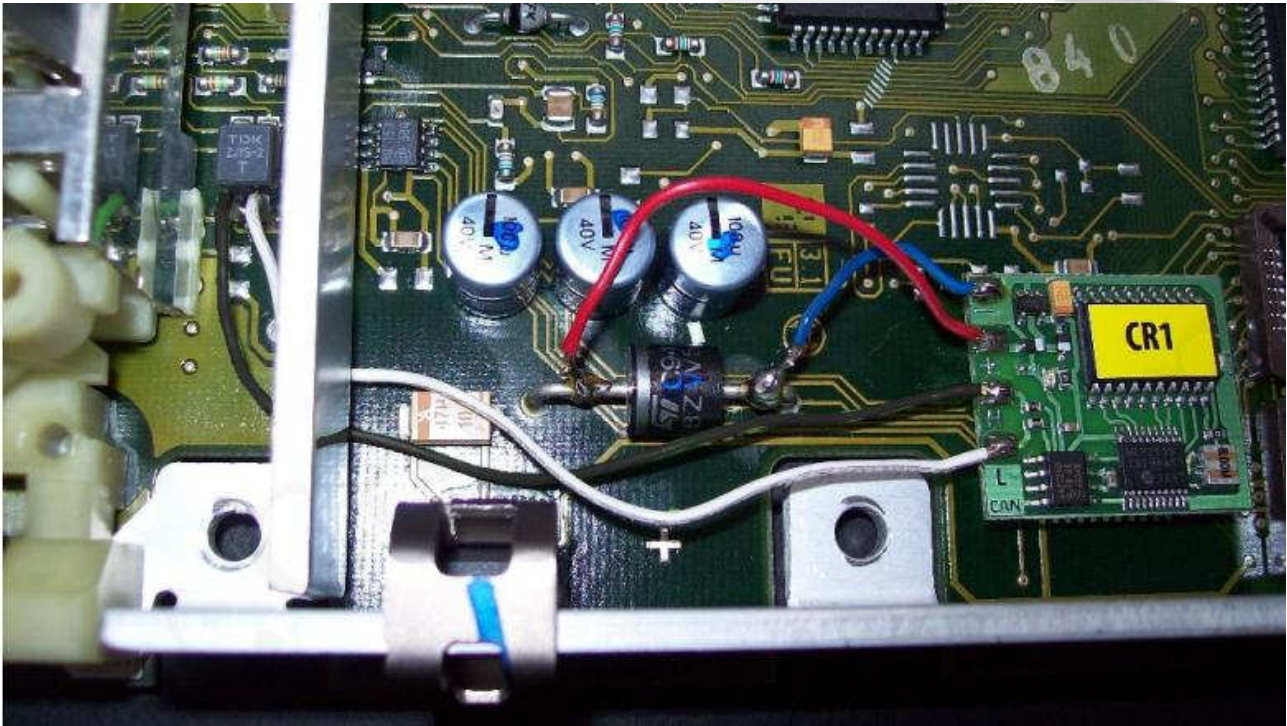






**In an older type of engine control module ECM, 1 plug, need to find the memory 24C02 marked as B58 or memory 24c04.**





Connecting emulator to ECM, EDC 1 plug.

**CAN H (Black Wire)**

**CAN-L (white wire)**

**GND**

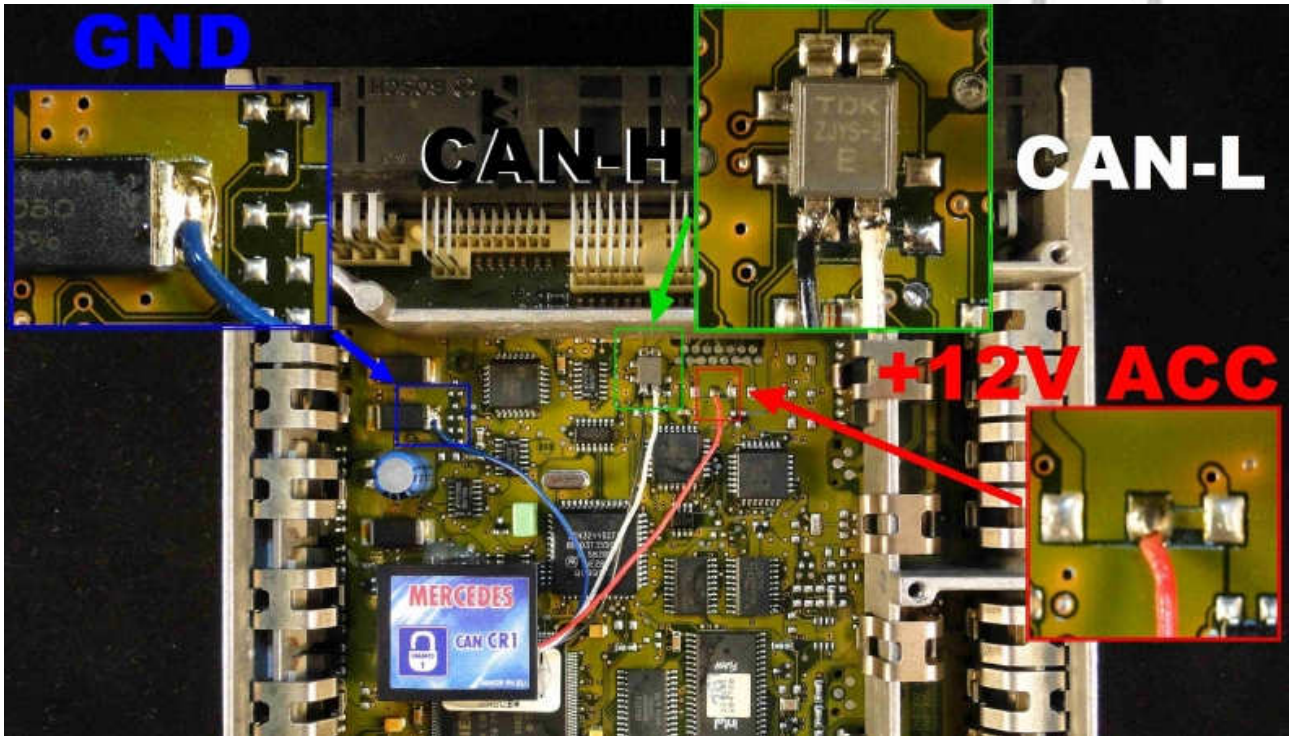
**Power from**

- 1) Run the reading of the EPROM 24C02 or 24C04**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**

**If there are problems with start, add ACC on 13 pin computer EDC  
(take it from second leg of LED).**

**→ Disconnected CAN from WSP!!!**

**ECM Bosch with HC11E9 in vehicles with engines of 320-6 cylinders, 430-8 cylinders ML 320 and 2,0 gasoline SLK 1998 with mechanical ignition switch**



**GND:** A3  
**+12V ACC:** A2  
**CAN-H:** D11  
**CAN-L:** D12

- 1) Run the reading of the MOTOROLA MCU HC11E9 (Mask 4E28B)**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated,** and make personalization by tester HTT or star Diagnosis because engine must work 60 seconds, to finish coding



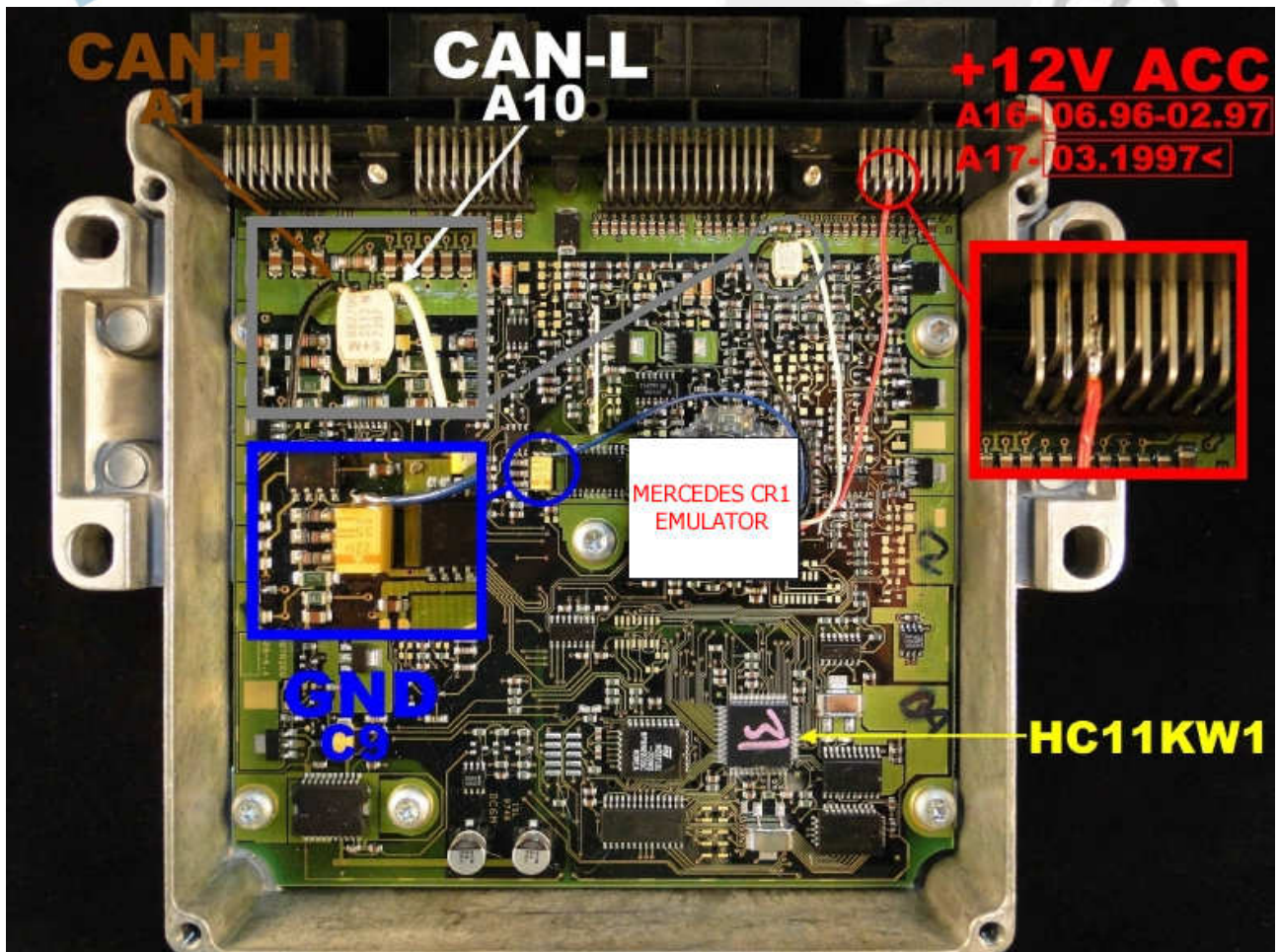
**Lucas 4 plugs**

E-class, 2,0 diesel – (with mechanical and electronic ignition switch)



**E-class Mercedes 2,0 diesel 1996 - Lucas A0195459432 ed013 sw25.96 fd30.96**





Driver is positioned on the passenger side in the engine compartment.

Connecting Emulator to ECM.

**Power supply** - pin 16A

**CAN L** - pin 10A

**CAN H** - pin 1A

**Ground** - pin 18C

**After make personalization of tester HHT or Star Diagnosis Because engine must work about 60 second to finished coding.**

**1) Run the reading of the MOTOROLA MCU HC11KW1**

**2) Process the file with the software IMMO Universal Emulator**

**3) Write with the new file generated, and make personalization of tester HHT or Star Diagnosis because engine must work about 60 seconds to finished coding.**

**→ Disconnected CAN from WSP!!!**

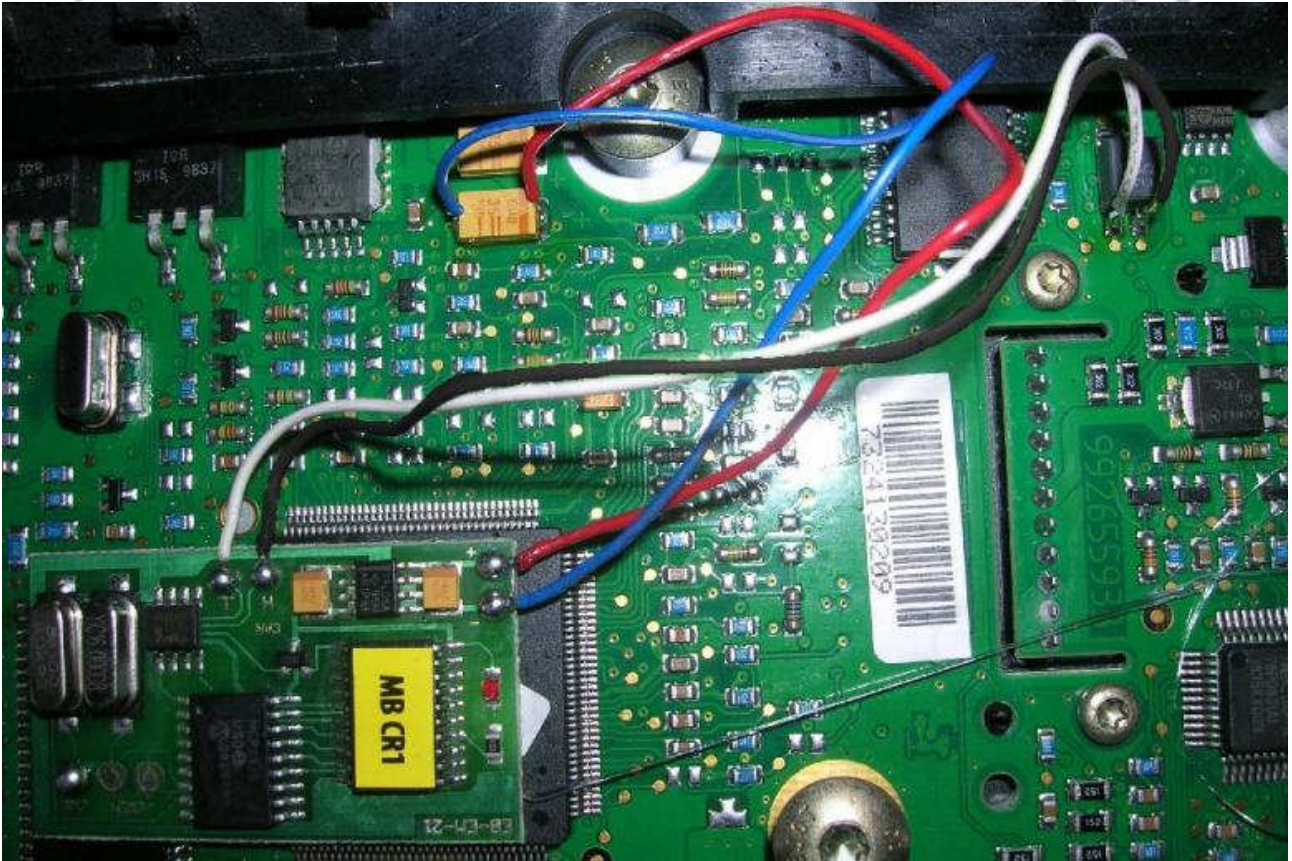
**A-class ECM VDO MSM - 1,4 – 1,6 – 1,9 gasoline**



**ECM is set up on air delivery pipe to engine with Air Mass Flow Sensor.**

ECU





**Red: Power + 12V ACC**

**Blue: Ground**

**Black: CAN-H**

**White: CAN-L**

- 1) Run the reading of the FLASH 29F200 (44pin)**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**

**After soldering we personalizes by the Star Diagnosis.**

**→ Disconnected CAN from WSP!!!**



## **MERCEDES CR2 WITH CAN NEWER**

Sprinter 2,2 Cdi 2,7 Cdi

ML 2,7 Cdi 5 plugs - it starts automatically it also works in 2,7 - 3,2 with electronic ignition switch – it starts automatically.

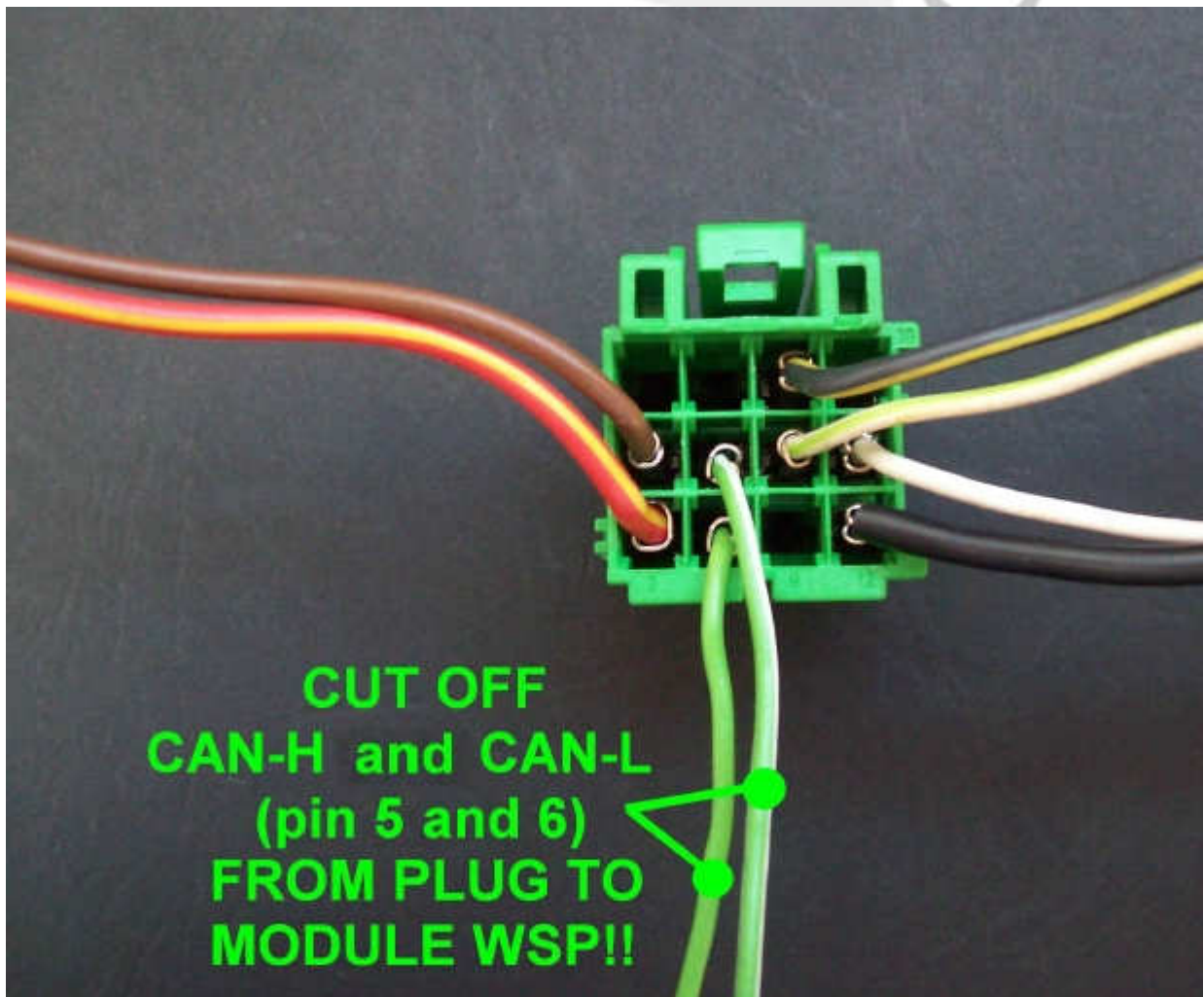
Emulator immo to the car group of Mercedes CR2 replaces damaged immobilizer or the car key for Mercedes Sprinter, ML 5 plugs.

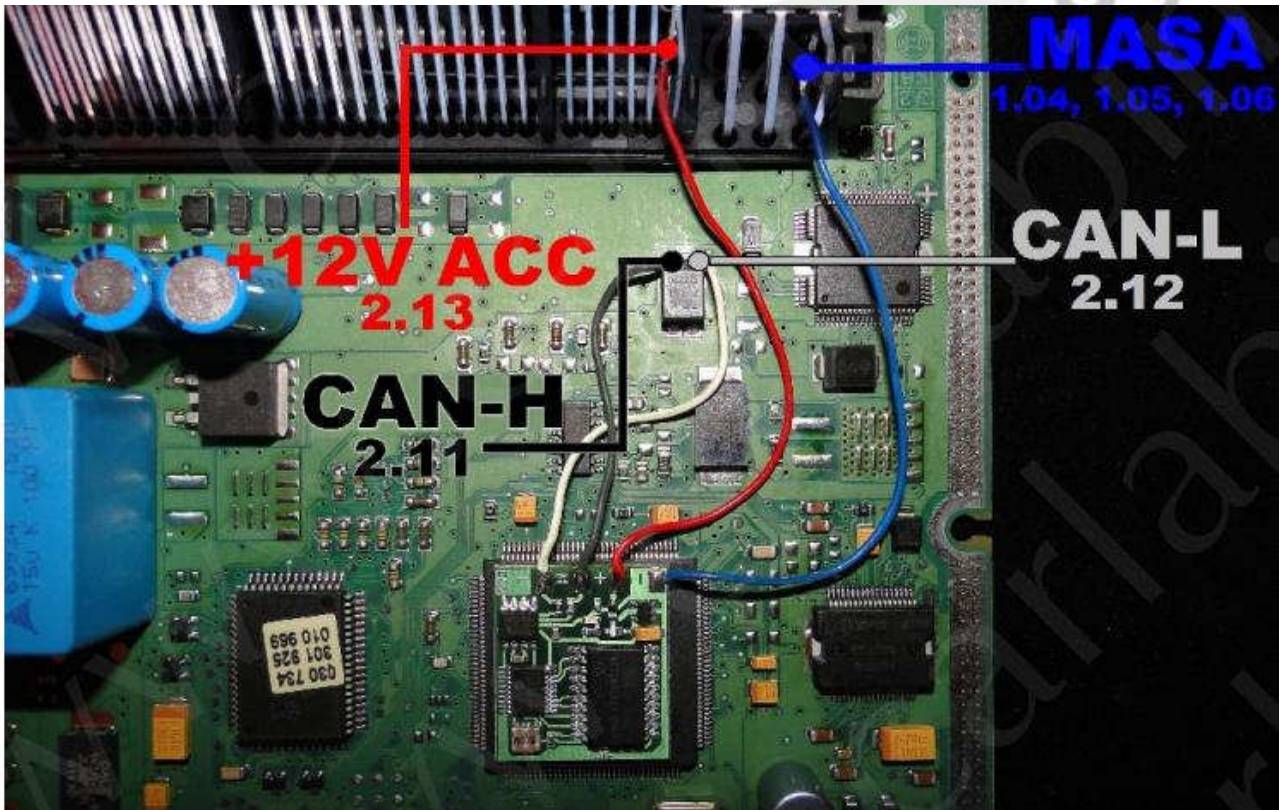
It function after made changes in memory content of Engine Control Module ECM.

In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service. Due to a low cost you can leave it in the car instead of buying a new immo or making car keys duplicate. There is a possibility of using it as the additional security!!!

Red LED indicating about transmission: will light up permanently after properly working.

### **When emulator is connected, disconnect CAN from ORIGINAL IMMO**





Connecting emulator to ECM 5 plugs Sprinter and ML:

**GND** - 1.04, 1.05, 1.06

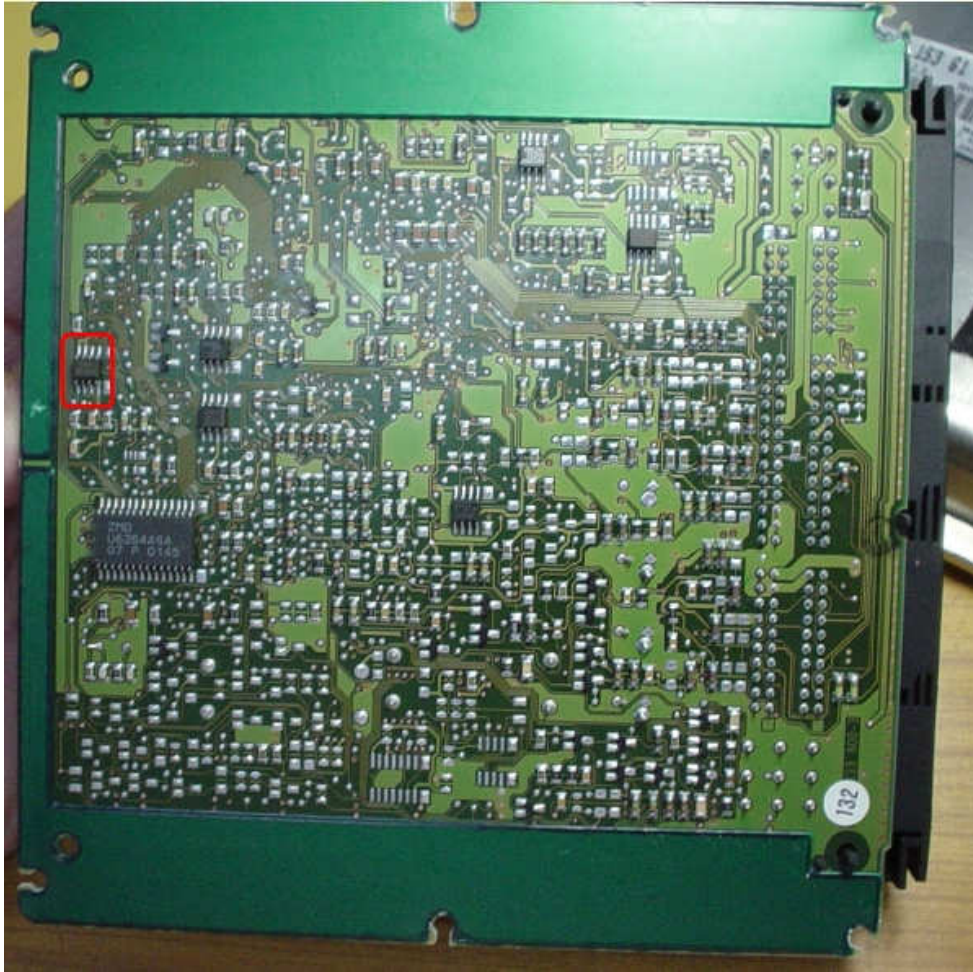
**Can H** - 2.11

**Can L** - 2.12

**ACC** - 2.13

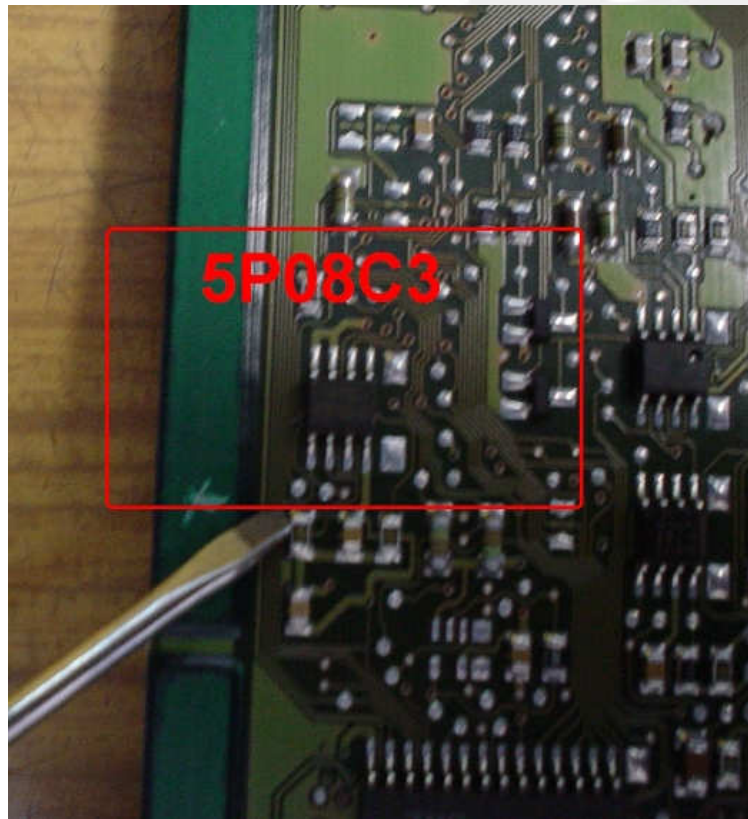
ECU





**In the ECM of Sprinter, ML CR2 engine, 5 plugs, find memory 5P08C3  
(read and type as SPI 95080).**





- 1) Run the reading of the EPROM 5P08C3**
- 2) Process the file with the software IMMO Universal Emulator**
  - Ver. 1** normal start automatically **(ECU + WSP)**
  - Ver. 2** electronic ignition start. **(ECU + EZS)**
- 3) Write with the new file generated**

## **NISSAN FROM 2000 to 2002 YEAR**

ECU from 200 to 202. - immo NATS  
2200cc and 2700cc Diesel 5 plugs with memory 24c04  
1.5, 1.8 gasoline Hitachi MEC with memory 93c46  
1,5, 1.8 and 2.0 gasoline Hitachi MEC with memory 93c56  
1.8 and 2.0 gasoline Hitachi MEC with memory 93C56  
1.4 gasoline Bosch witch memory 24LC02

Models: Almera, Primera, Almera Tino, Micra, Terrano  
0 281 010 141  
0 281 010 718  
0 281 010 265  
0 281 010 708  
0 281 010 809  
0 281 010 316  
MEC200

Emulator immo to Nissan cars replaces damaged immobilizer or the car key.

It is necessary to made changes in memory content of Engine Control Module.

In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service. Due to a low cost you can leave it in the car instead of buying a new immo or making car keys duplicate.

There is a possibility of using it as the additional security!!!

Two LEDs indicating:

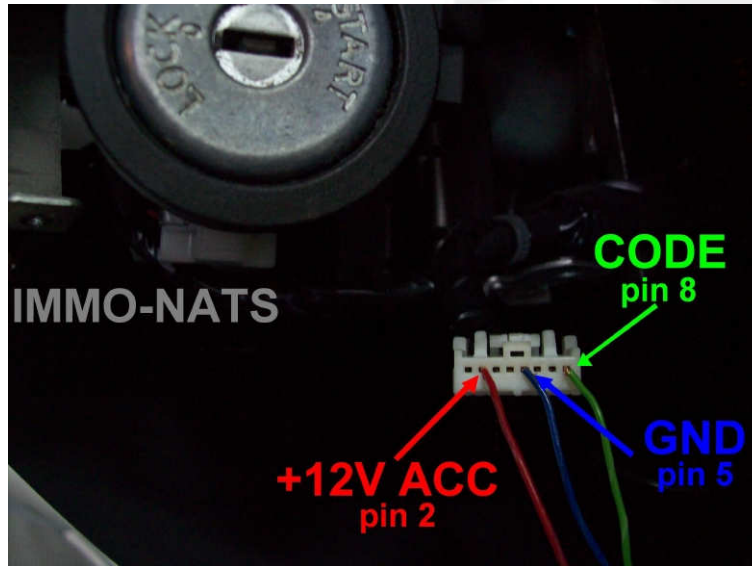
**White** – power

**Blue** – transmission

(-adjusting to the driver – blinking 0,1 sec

-after adjusting – 2 seconds is light on and then will stop for 0,1 sec)

**Connecting the emulator to plug NATS:**



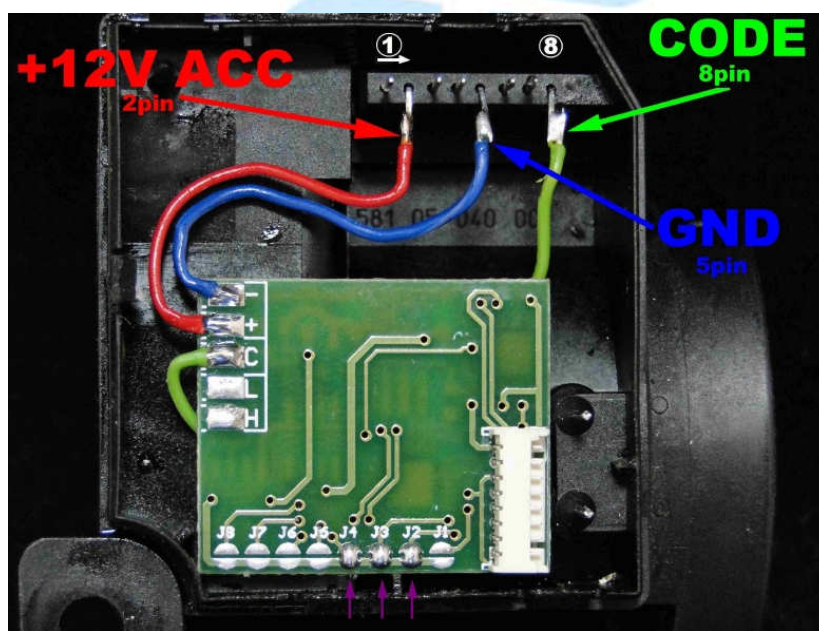
**+12V ACC** - pin 2

**CODE** - pin 8

**GND** - pin 5

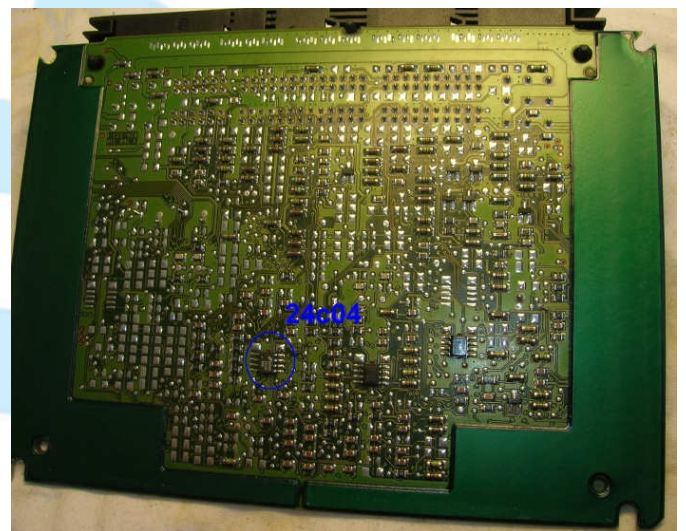
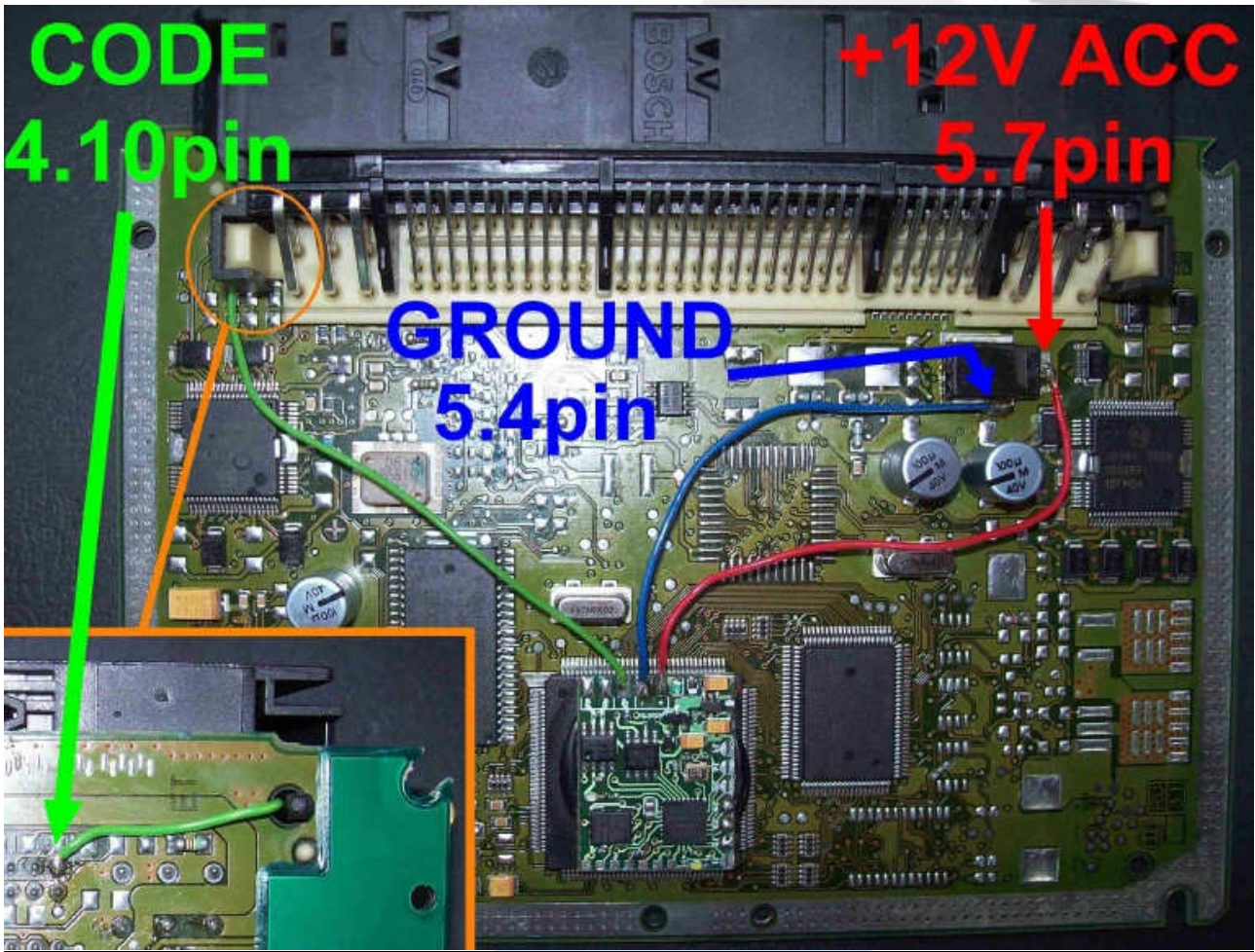
**Due to possible construction changes of the cars, before connecting the device check signals by multimeter on the immobilizer plug or in ECM.**

**Connecting the emulator inside to NATS:**





**ECM 2200 and 2700 diesel - 5 plugs with memory 24C04**

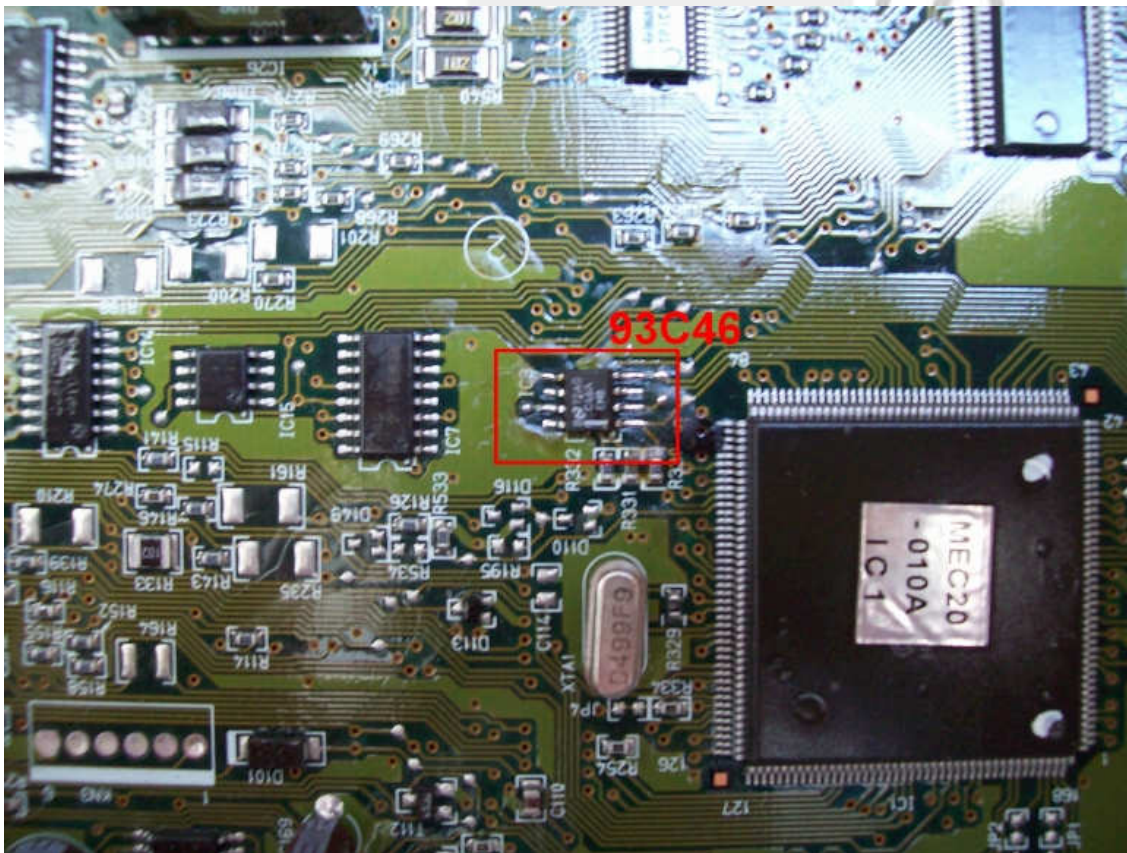


**In the ECU find memory eeprom 24C04**



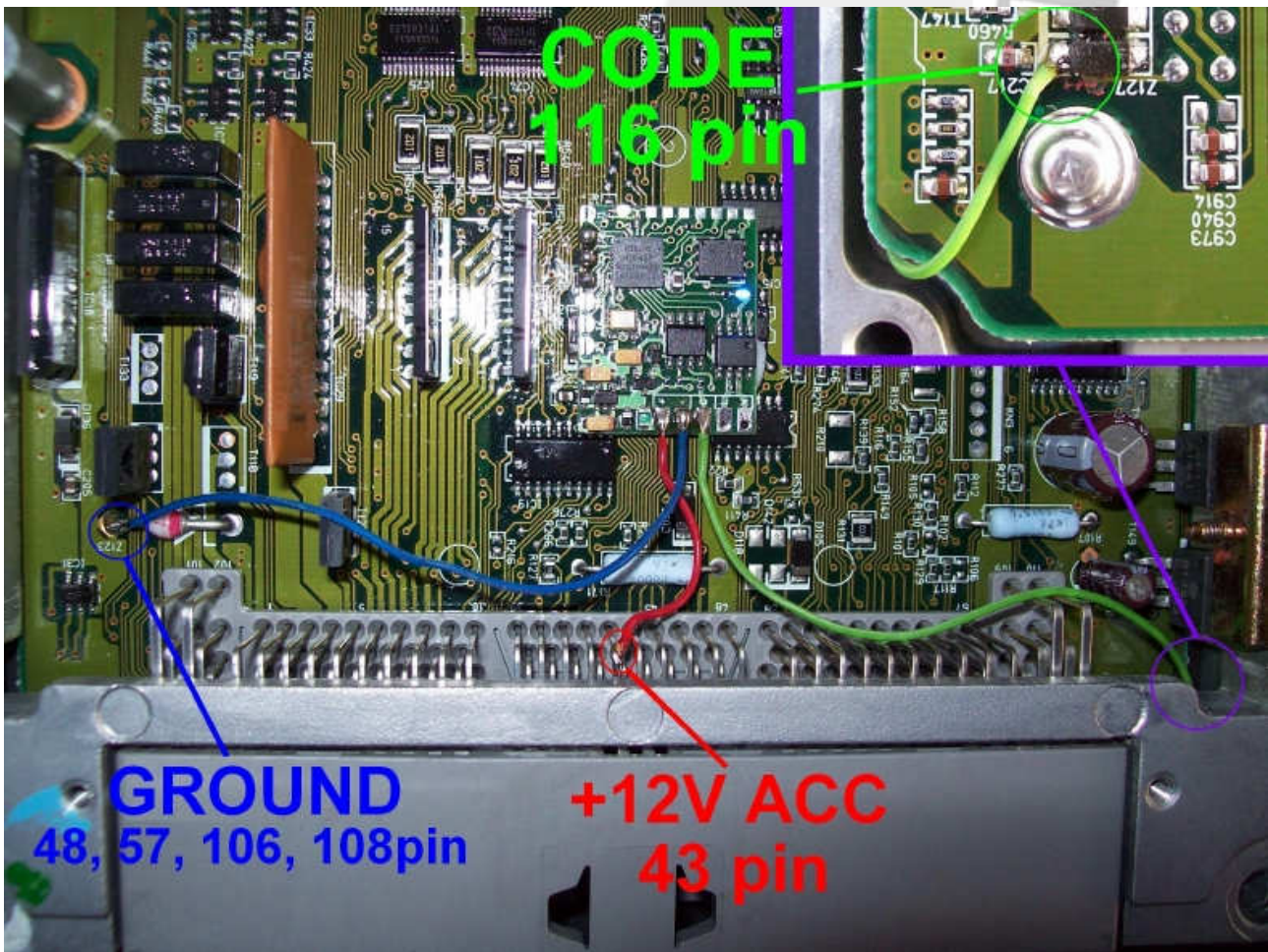
- 1) Run the reading of the EPROM 24C04
- 2) Process the file (2200cc or 2700cc) with the software IMMO Universal Emulator
- 3) Write with the new file generated

**1.5 and 1.8 gasoline Hitachi MEC with memory 93c46**



**In ECM find eeprom 93C46**

- 1) Run the reading of the EPROM 93C46
- 2) Process the file with the software IMMO Universal Emulator
- 3) Write with the new file generated



Connecting emulator in ECM:

**CODE** - 116pin (**cut off from the plug-in controller**)

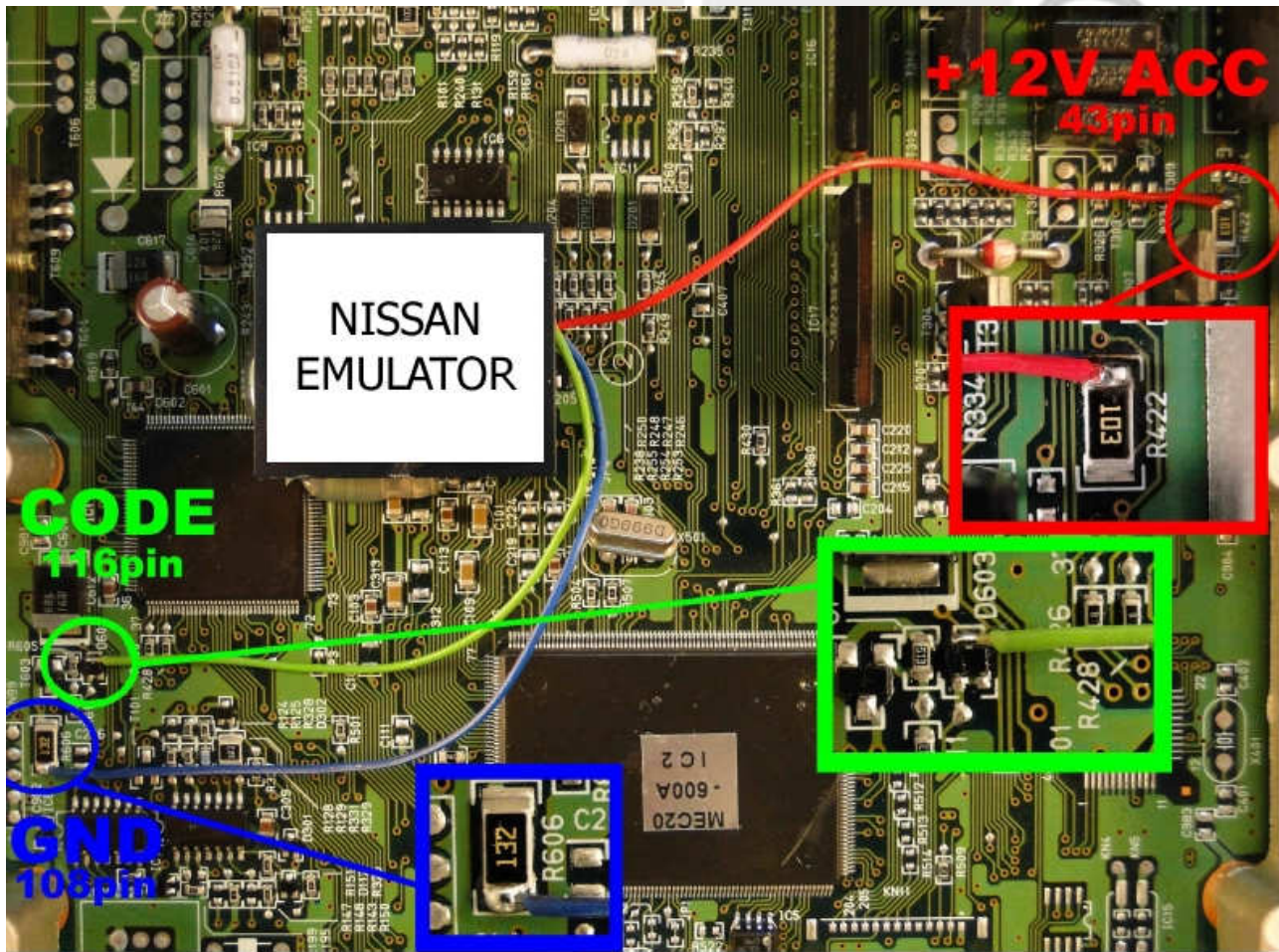
**+12V ACC** - 43 pin

**GROUND** - 108 pin

Before connecting the driver, emulator must be precisely isolated by the isolation strap.



**1.5, 1.8 and 2.0 gasoline Hitachi MEC with memory 93C56**

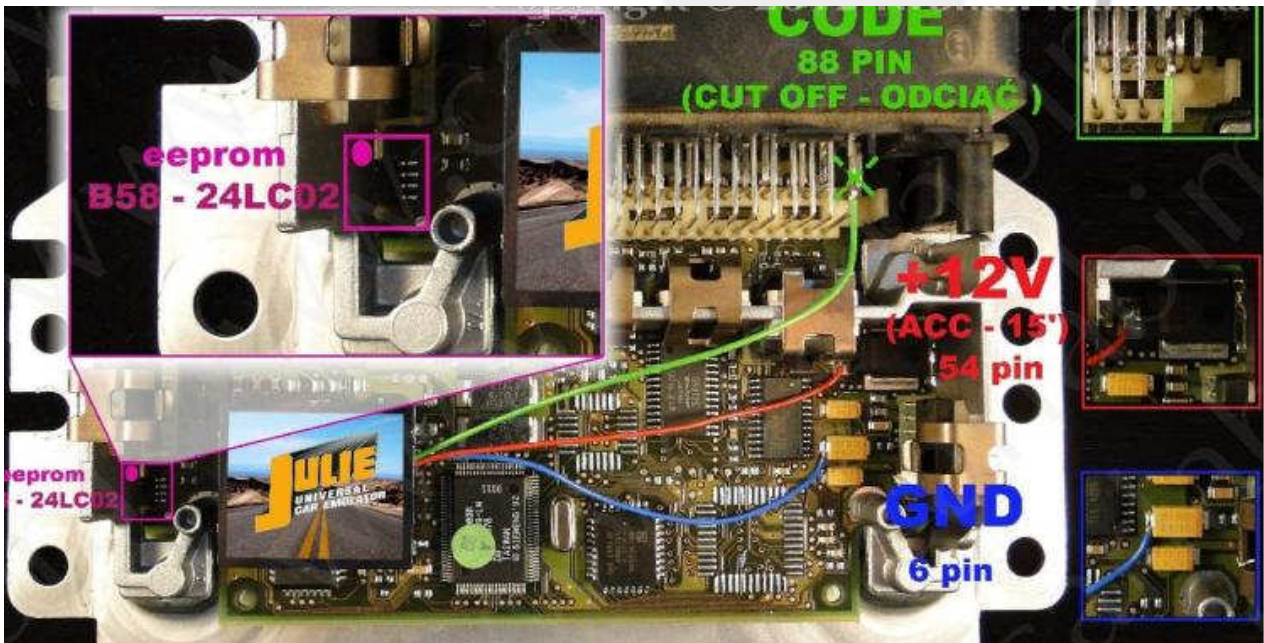


**→ CUT OFF FROM THE PLUG-IN CONTROLLER**

- 1) Run the reading of the EPROM 93C56**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**

Before connecting the driver, emulator must be precisely isolated by the isolation strap.

## 1.4 gasoline Bosch witch memory 24LC02



Connecting emulator in ECM:

**CODE** - 88pin (**cut off from the plug-in controller**)

**+12V ACC** - 54 pin

**GROUND** - 6 pin

- 1) Run the reading of the EPROM 24LC02
- 2) Process the file with the software IMMO Universal Emulator
- 3) Write with the new file generated



## **OPEL IMMO ON HC05**

ECM 1,2 – 1,4 gasoline with two black plugs and processor Motorola HC11E20.  
ECM 2,0 – 2,2 and 2,5 gasoline with memory eeprom 24C02

Emulator immo to Opel cars replaces damaged immobilizer or the car key.

It function after made changes in memory content of Engine Control Module ECM.

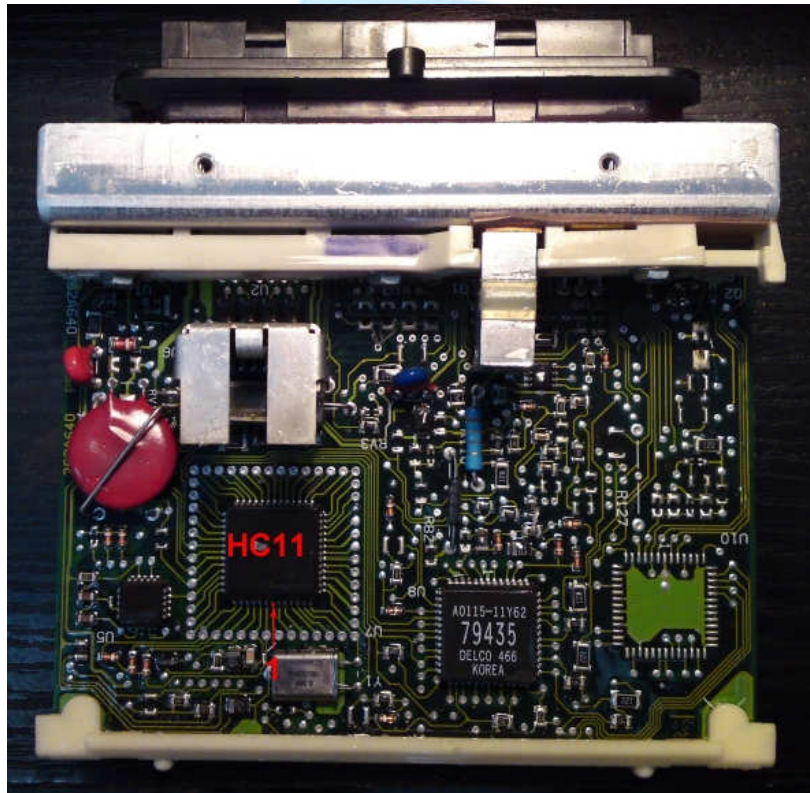
In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service. Due to a low cost you can leave it in the car instead of buying a new immo or making car keys duplicate. There is a possibility of using it as the additional security!!!

Two LEDs indicating:

**Green** - power

**Red** - transmission (after adjusting it blinks each 5 seconds).

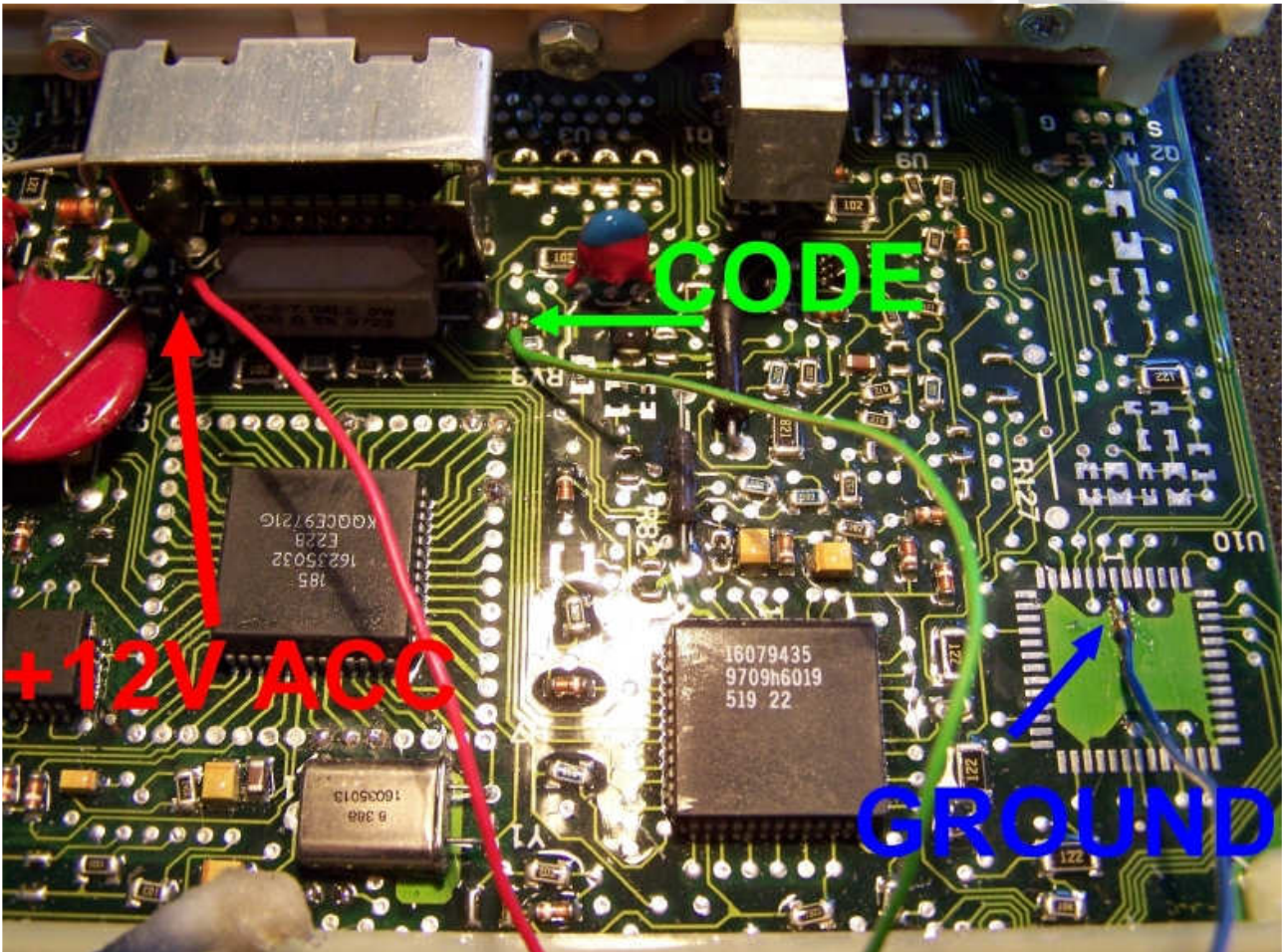
### **ECMs 1,2 -1,4 gasoline with two black plugs and processor Motorola HC11E20.**



In ECM find processor Motorola HC11E20.



- 1) Run the reading of the MOTOROLA MCU HC11E20
- 2) Process the file with the software IMMO Universal Emulator
- 3) Write with the new file generated



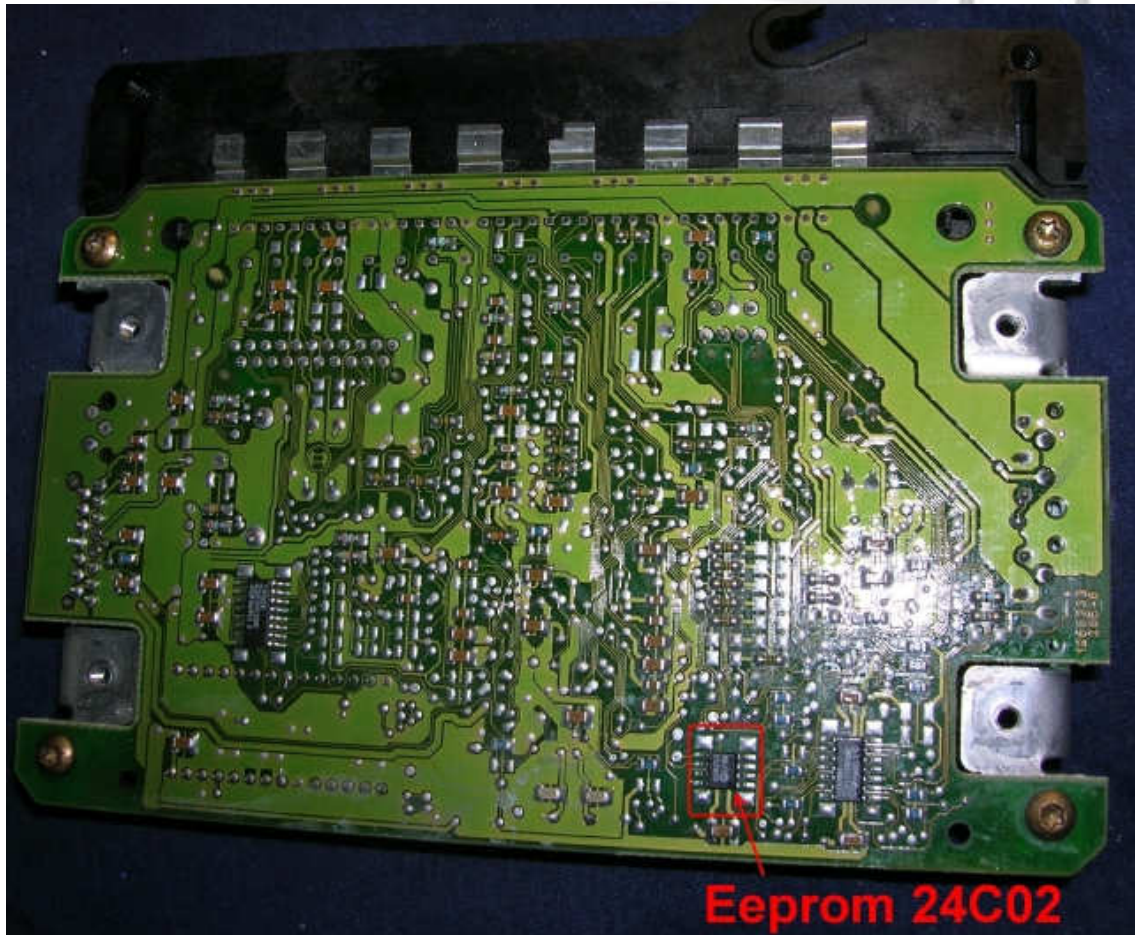
Connecting emulator in ECM:

- Blue** - ground
- Red** - power ACC
- Green** - immobilizer

**Additionally connect in plug immo pin 6 with 7  
(involve troubles about speed signal).**

Before connecting the driver, emulator must be precisely isolated by the isolation strap.

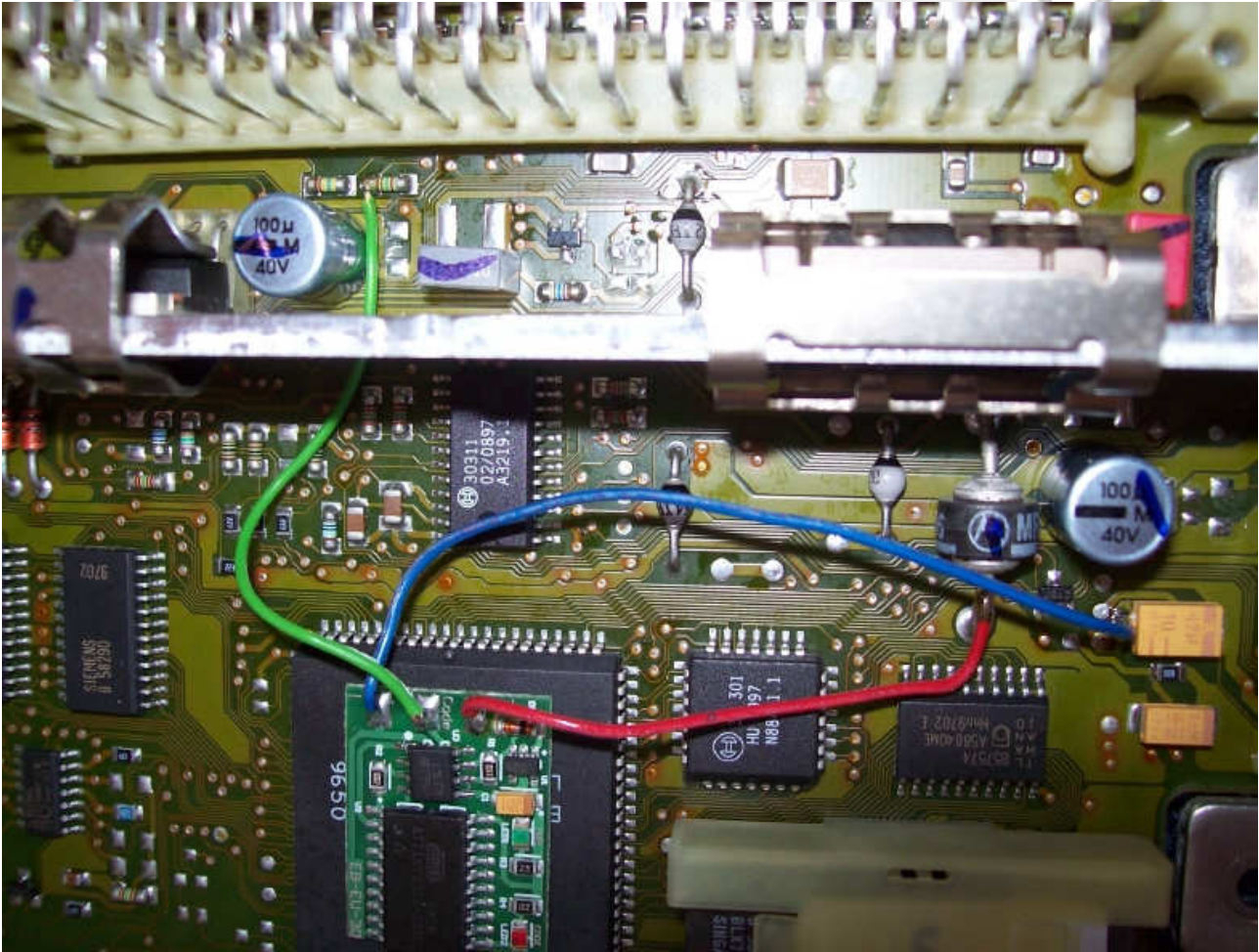
**ECMs 2,0 – 2,2 and 2,5 gasoline with memory eeprom 24C02**



**In ECM find eeprom 24C02**

- 1) Run the reading of the EPROM 24C02**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**





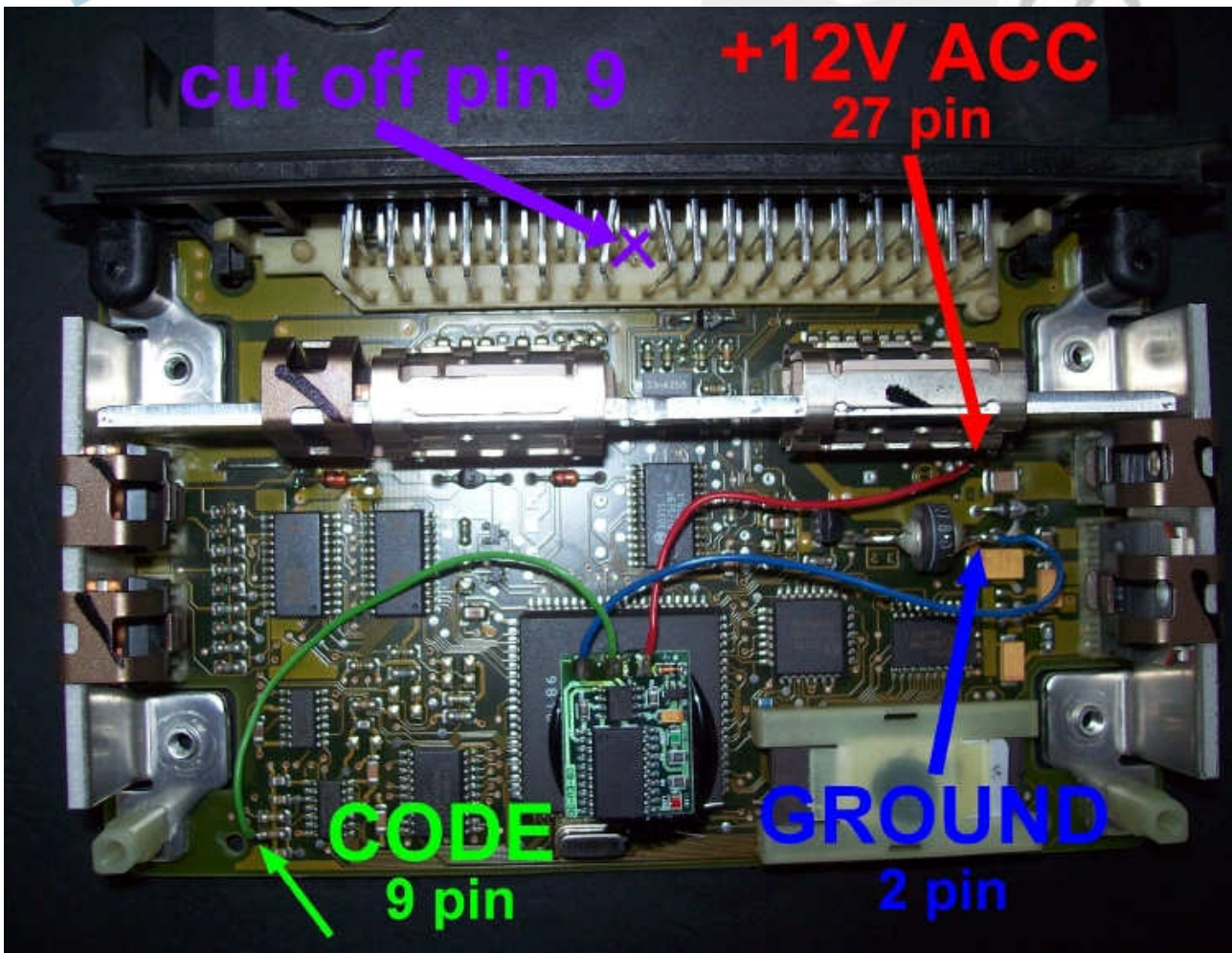
Connecting emulator in ECM (**2,0 – 2,2 gasoline**) :

- pin 2 - **ground**
- pin 37 - **power ACC**
- pin 9 - **immo line**

**Additionally disconnect immo and connect in plug immo pin 6 with 7 (involve troubles about speed signal).**

Before connecting the driver, emulator must be precisely isolated by the isolation strap.





Connecting emulator in ECM (2,5 gasoline):

- pin 2 - **ground**
- pin 27 - **power ACC**
- pin 9 - **immo line**

**Additionally disconnect immo and connect in plug immo pin 6 with 7 (involve troubles about speed signal).**

Before connecting the driver, emulator must be precisely isolated by the isolation strap.

## **RENAULT WITHOUT CAN**

Sirius 32 **without** CAN  
Sirius 34 1,4 1,6 2,0  
EMS 3132  
1,9 2,2 and 2,5 Dci **without** Can  
1,5 Dci **without** CAN  
1,9 Dti 1 plug  
1,9 Dti 2 plugs  
1,9 Diesel DCU3  
2,8 Td  
3,0 gasoline 1 plug

Emulator immo to Renault cars replaces damaged immobilizer or the car key.

It function after made changes in memory content of Engine Control Module ECM.

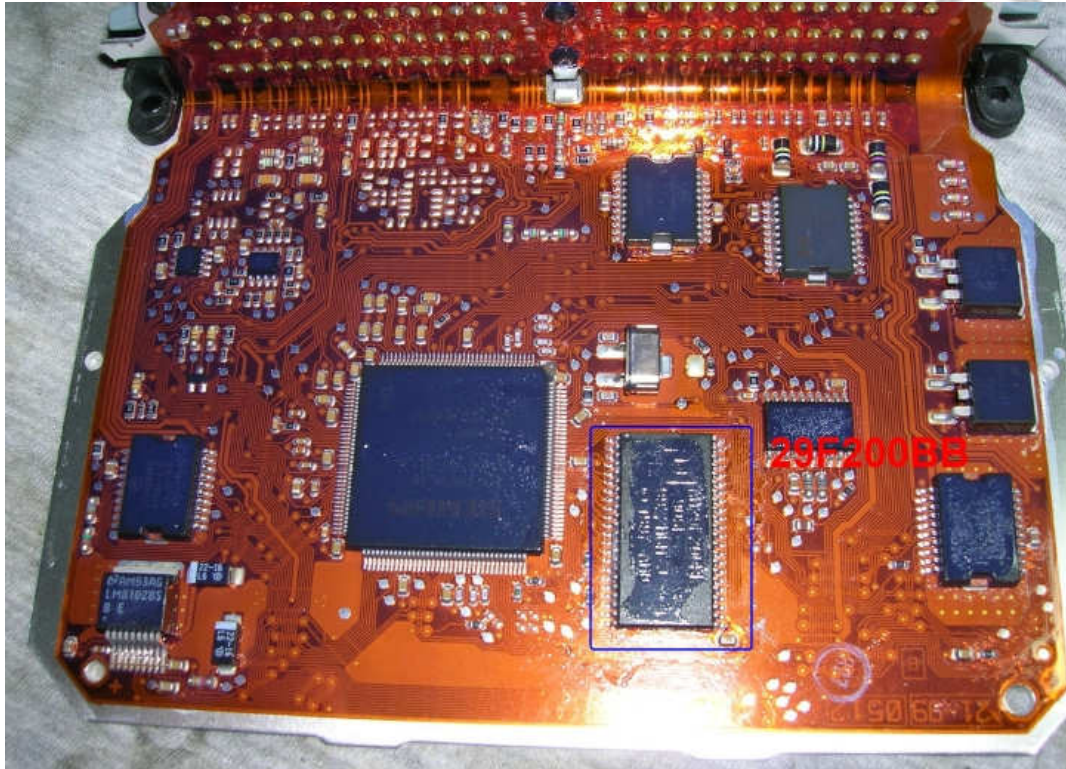
In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service. Due to a low cost you can leave it in the car instead of buying a new immo or making car keys duplicate.

Two LEDs indicating:

**Green** - power

**Red** - transmission (after adjusting it blinks each 2 seconds).

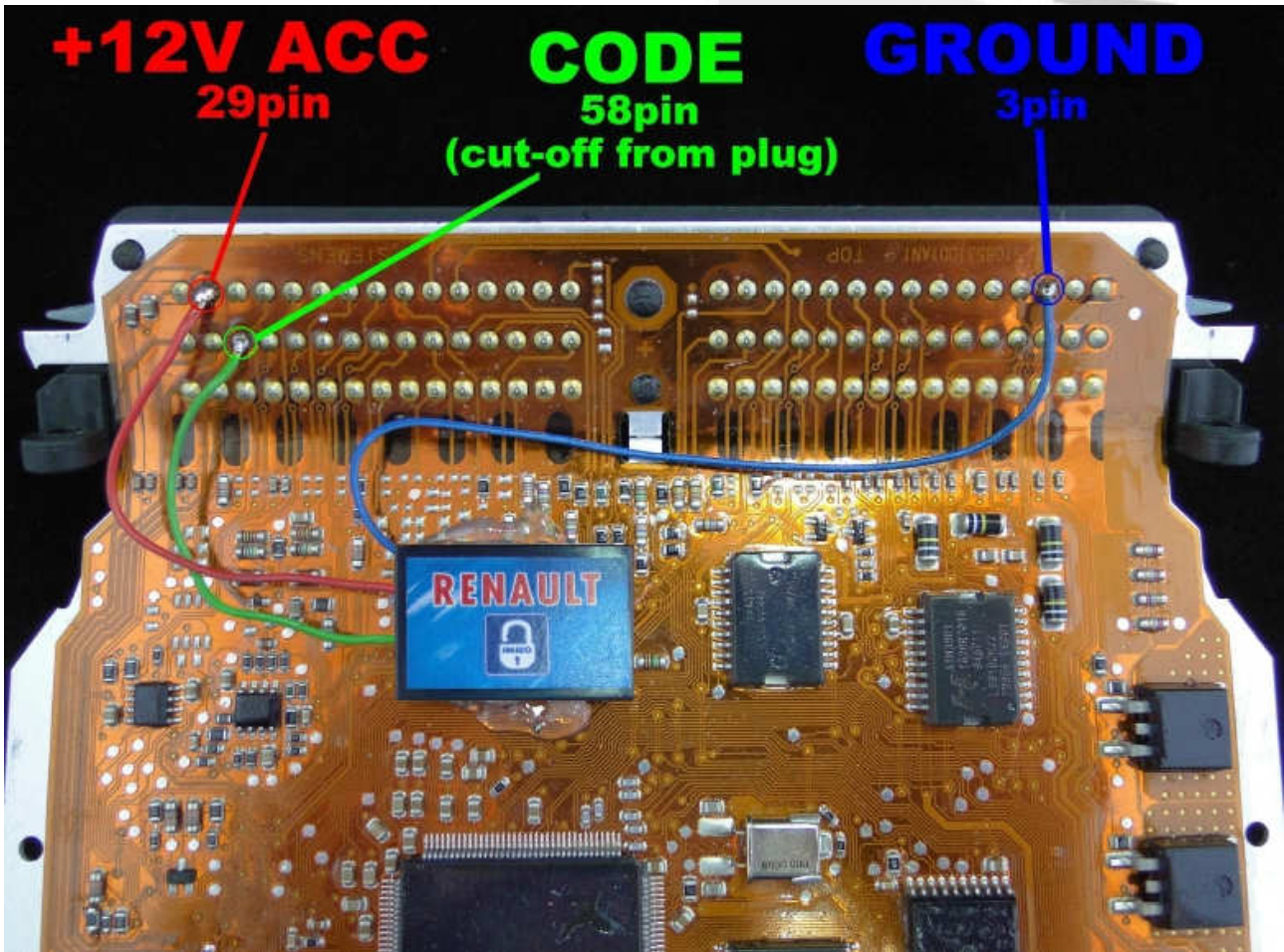
**Sirius 32 without CAN**



**In ECM Sirius 32 is a flash 29f200 or 29f400.**

- 1) Run the reading of the FLASH 29F200 or 29F400**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**





**Connecting emulator to ECM:**

**+12 ACC = pin 29**

**Code = pin 58**

**Ground = pin 3**

**Cut off pin 58 from plug**

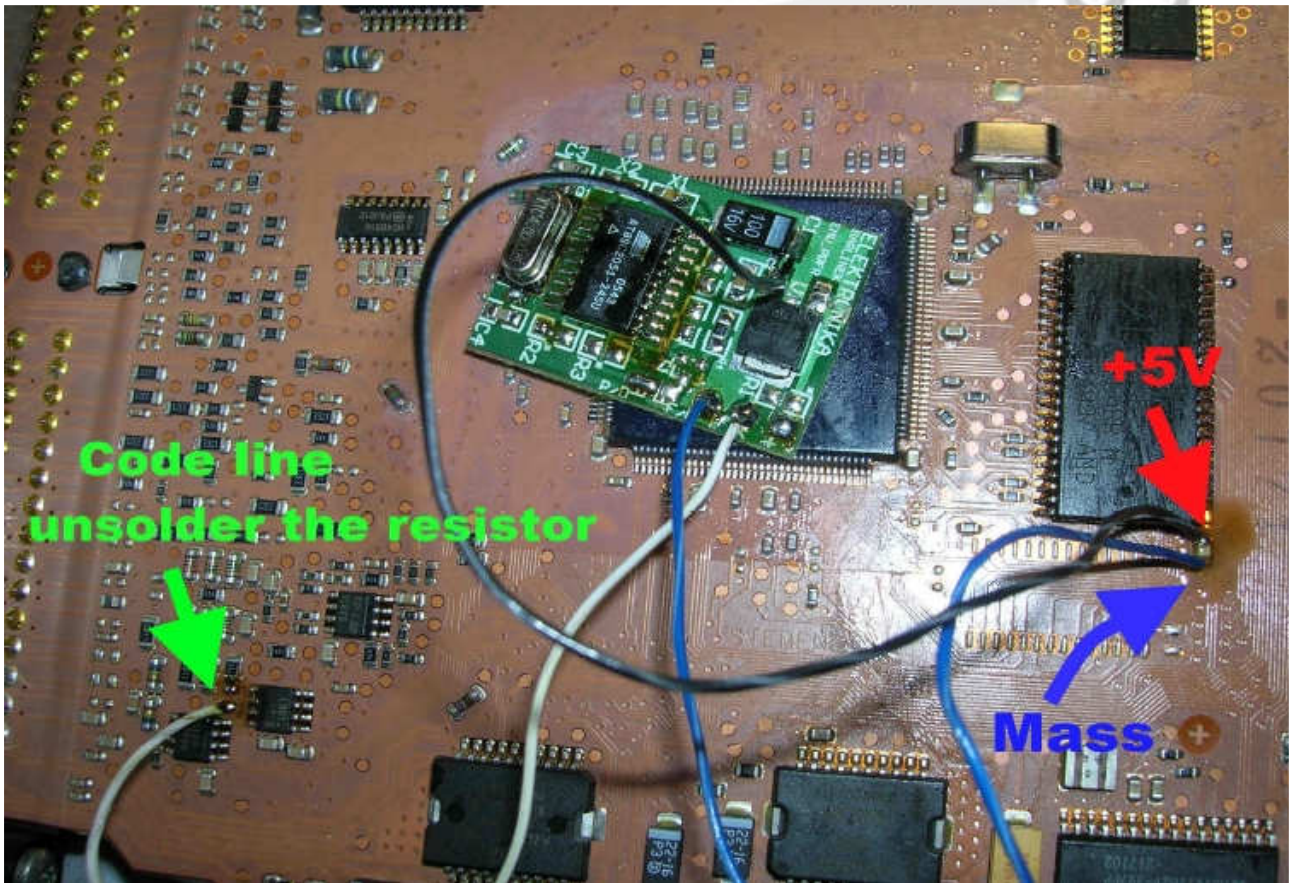
**Sirius 34 - 1,4 1,6 2,0**



**In ECM Sirius 34 is flash 29f200 or 29f400.**

- 1) Run the reading of the FLASH 29F200 or 29F400**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**

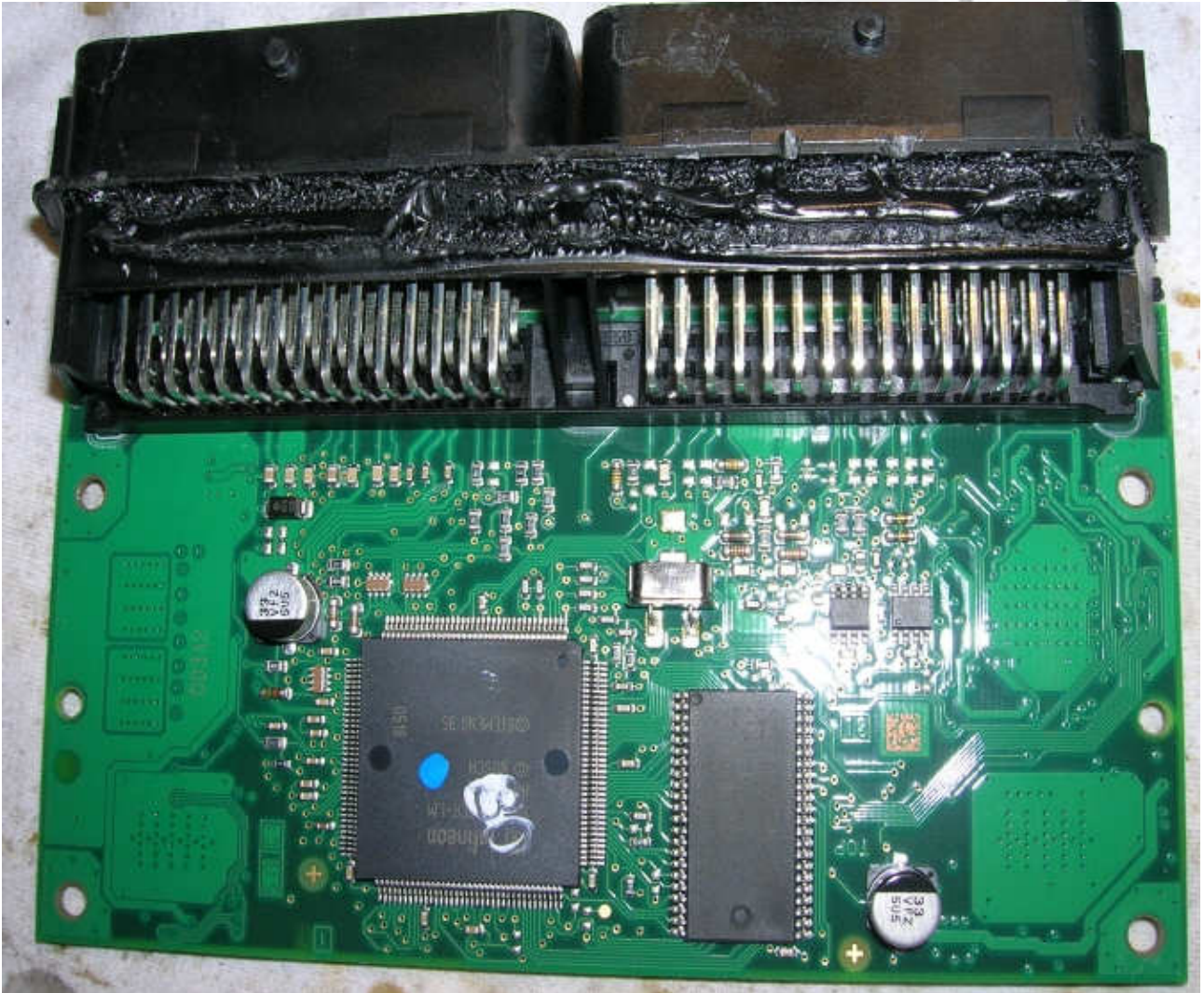




**Power the emulator take from the capacitor at the flash.**

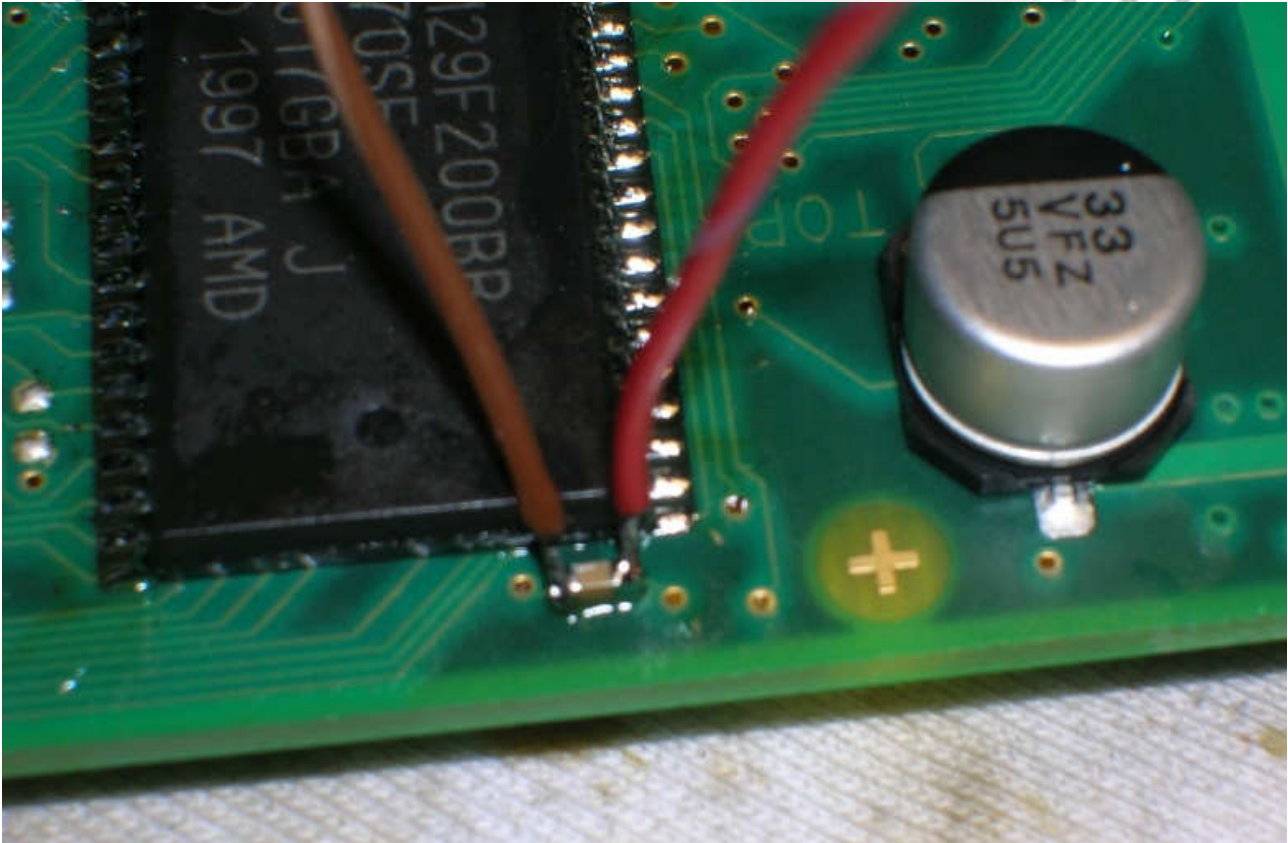


**EMS 3132**

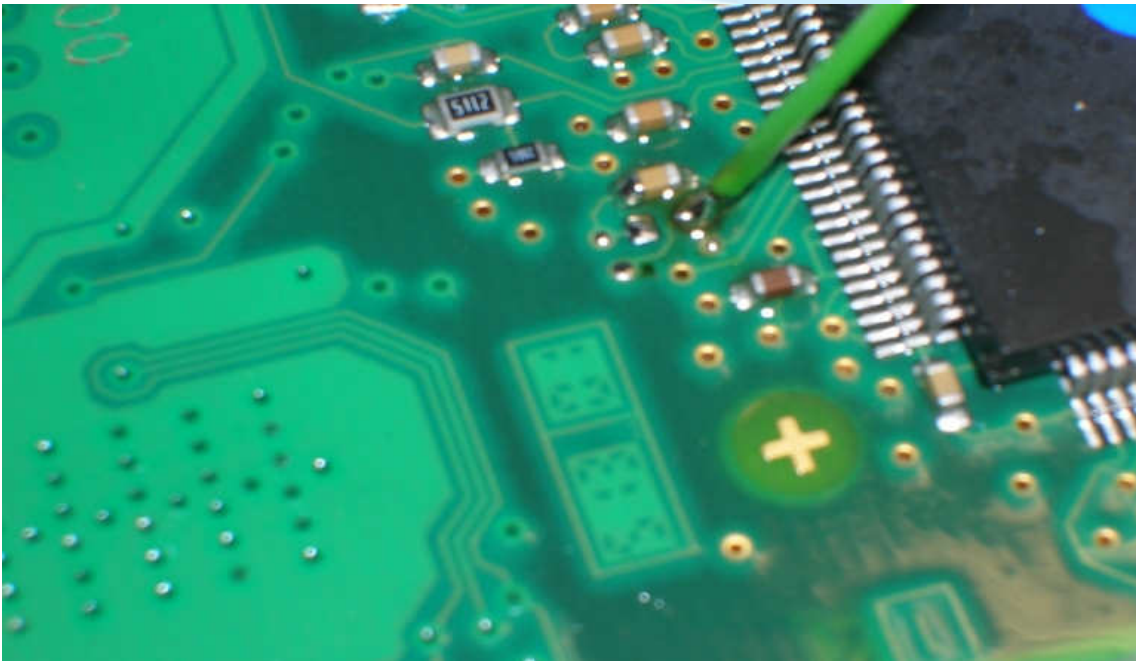


**In the EMS3132 drivers is flash 29f200 or 29f400.**

- 1) Run the reading of the FLASH 29F200 or 29F400**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



**Power for the emulator take from the capacitor at the flash.**



**Connect emulator as pictured by unsoldering the capacitor.  
Connect to the point which goes to the processor**



**1,9 2,2 and 2,5 Dci without CAN**

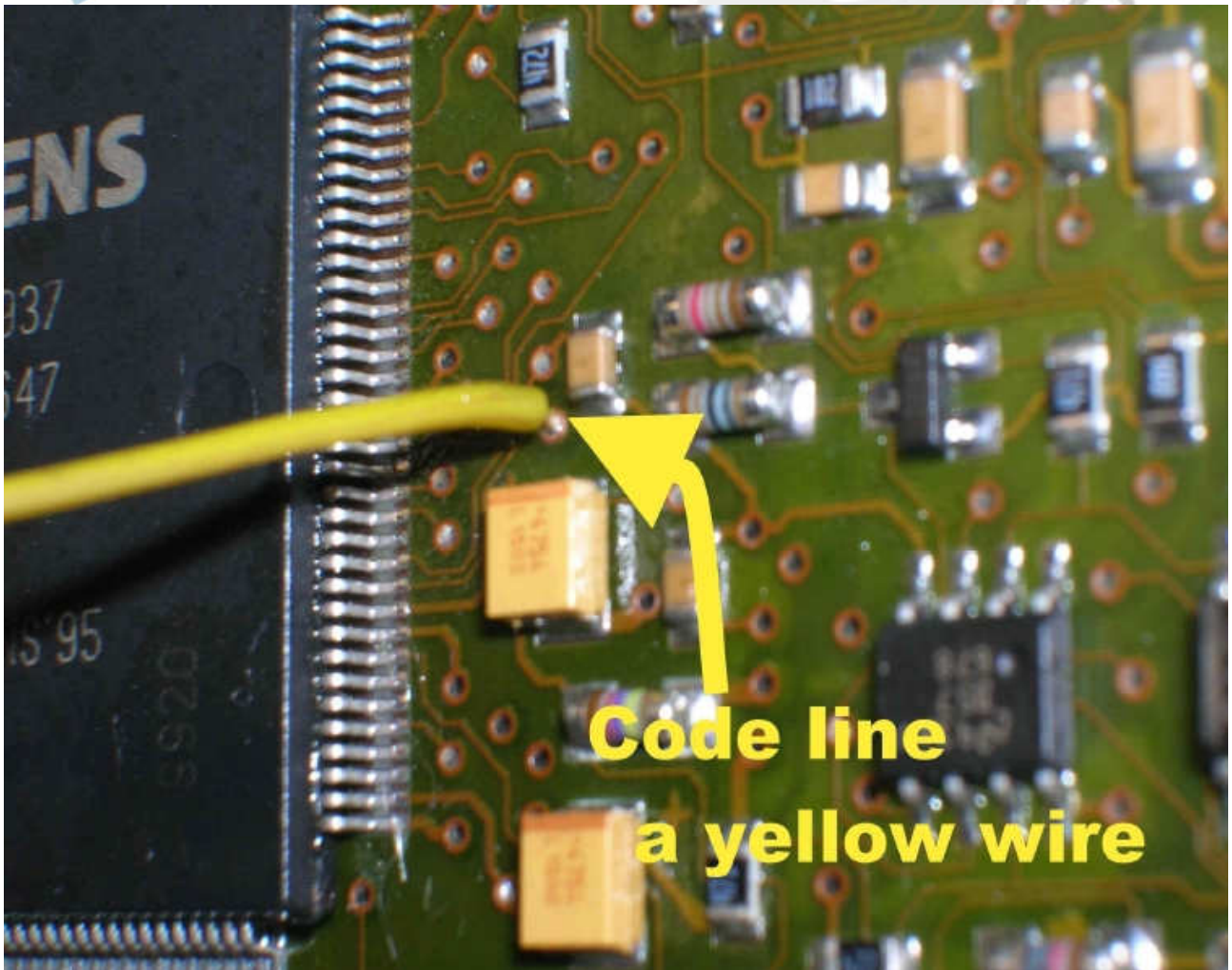


**Renault Laguna 1,9 Dci 1999 year mechanical ignition switch.**



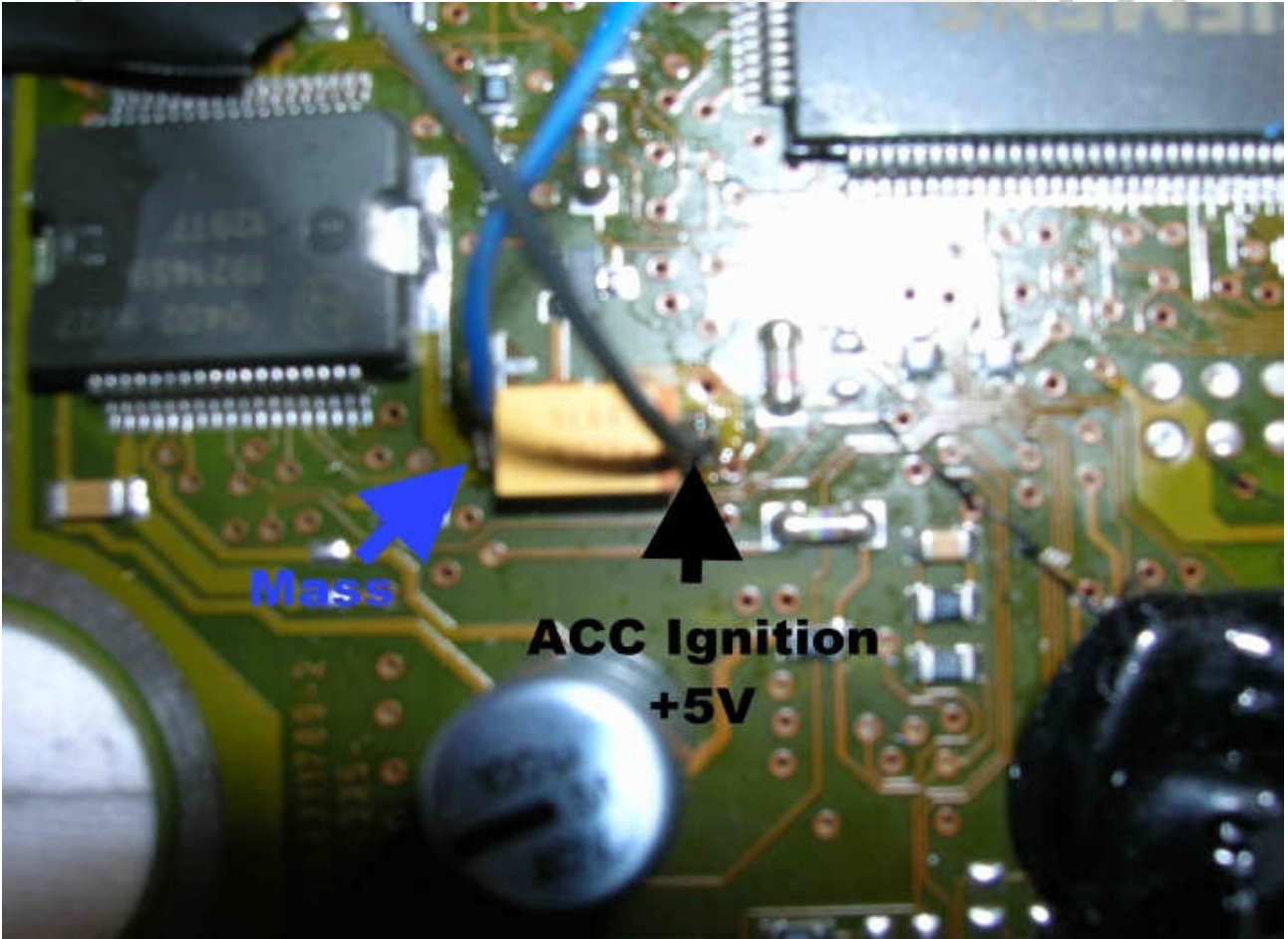


- 1) Run the reading of the EPROM 5P08C3**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



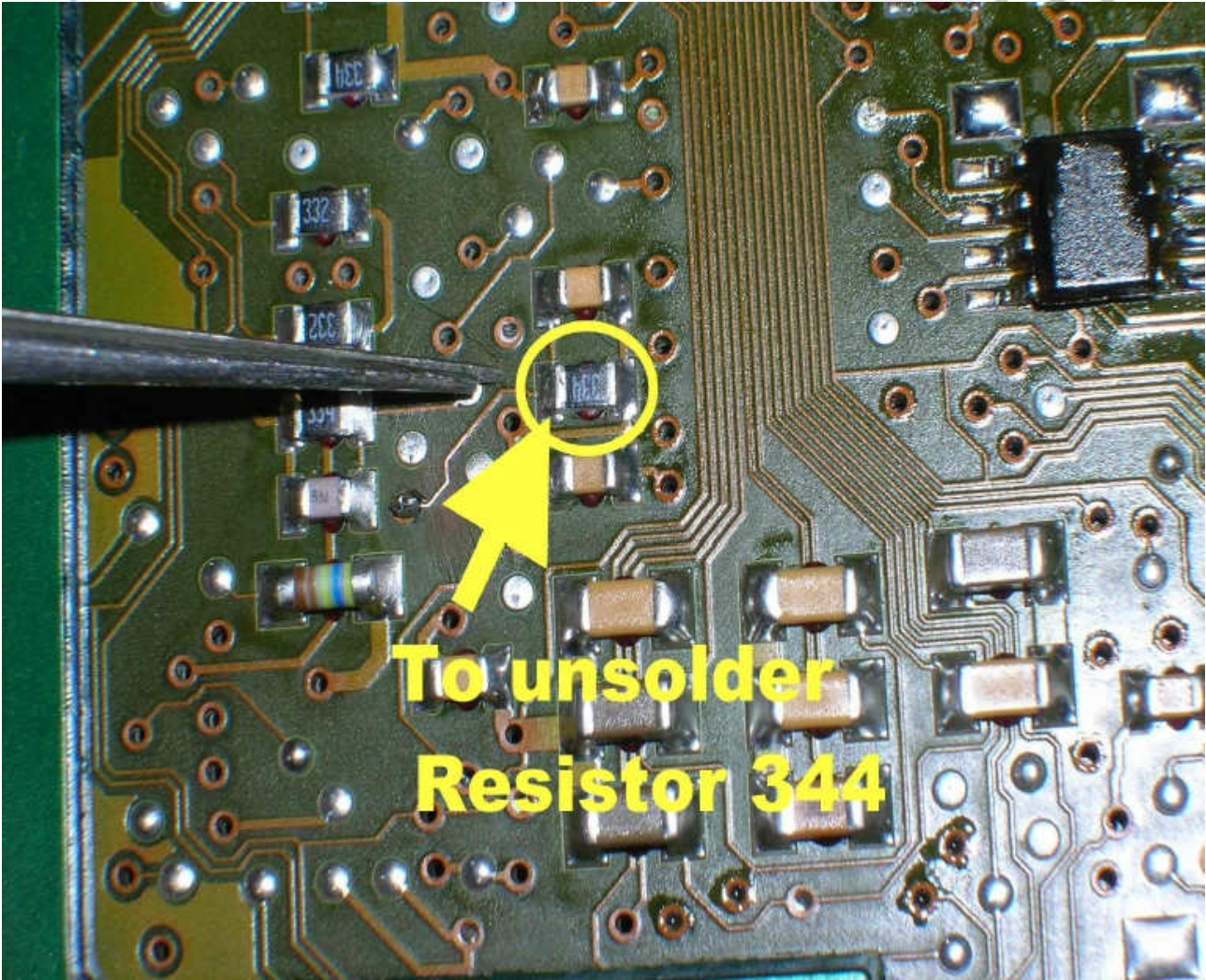
**In ECM, immo line (code) of emulator solder to the point as pictured.**

ES



**Power for the emulator take from the capacitor on the driver plate.**



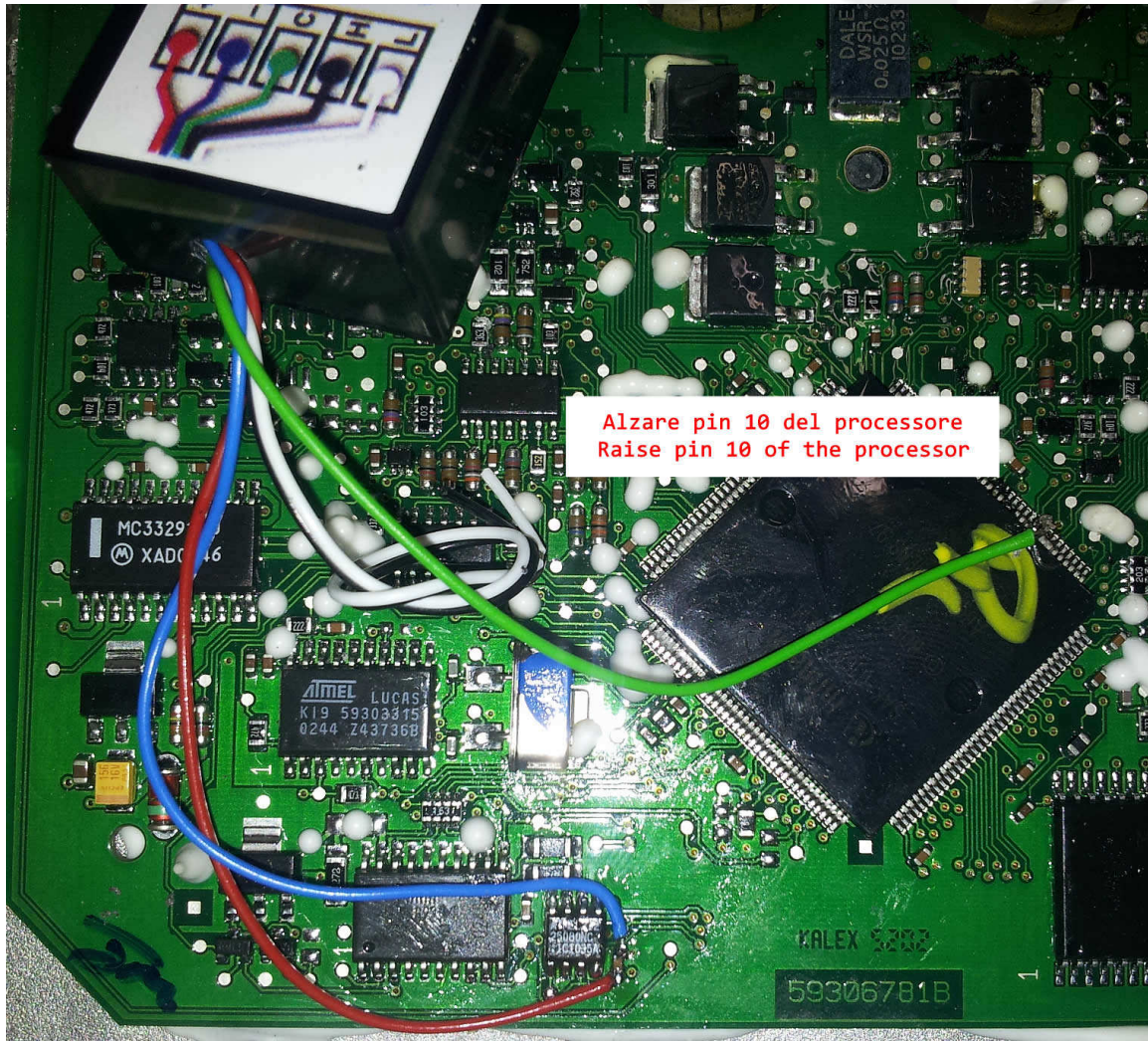


**→ Remove resistor 334**

**Turn on the ignition for 30 seconds, turn it off for 30 seconds  
and repeat it a few times**



**1,5 Dci without CAN**



**Unlock version without odometer.**

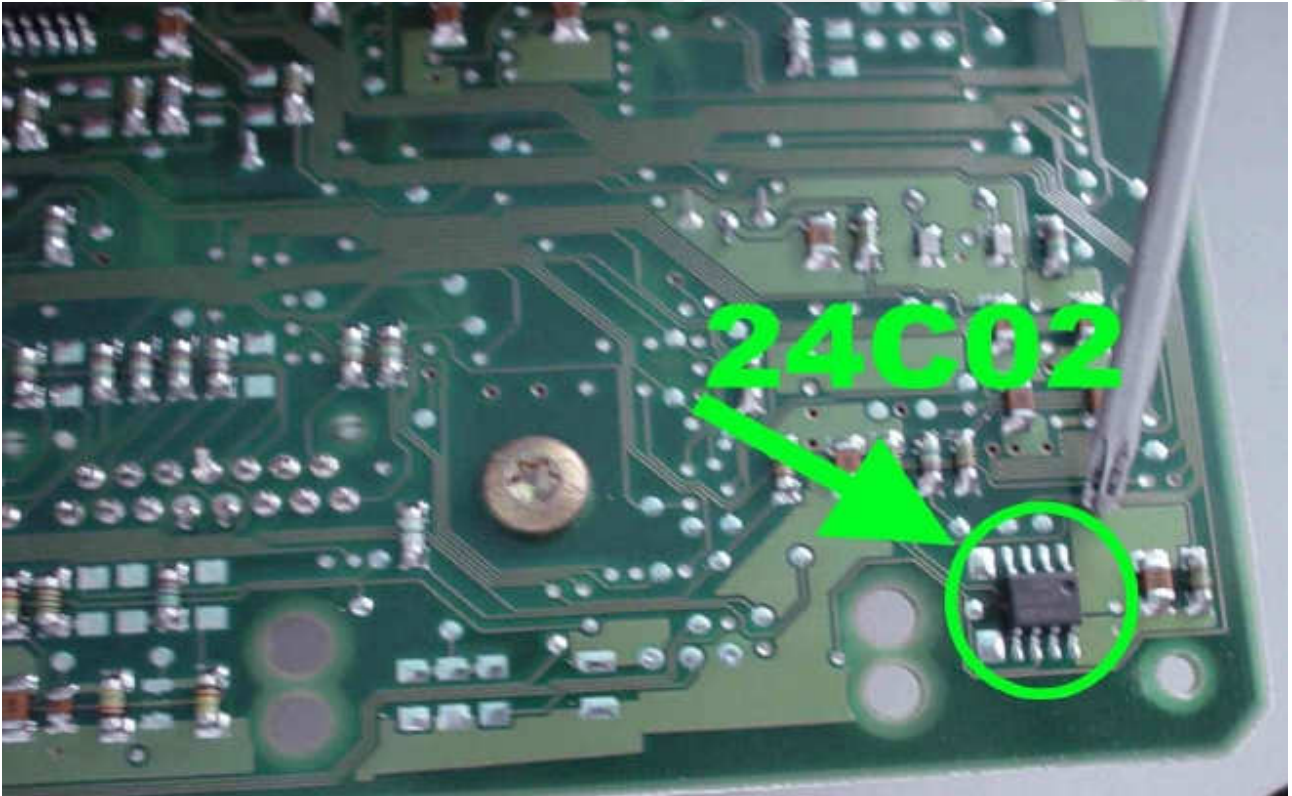
- 1) Run the reading of the EPROM 25080**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**

**immo line is 10 pin of processor, visible in the photo, which must be held up.**

Power take from capacitor at the memory.

**→ Add injectors and setting by Clip or Launch.**

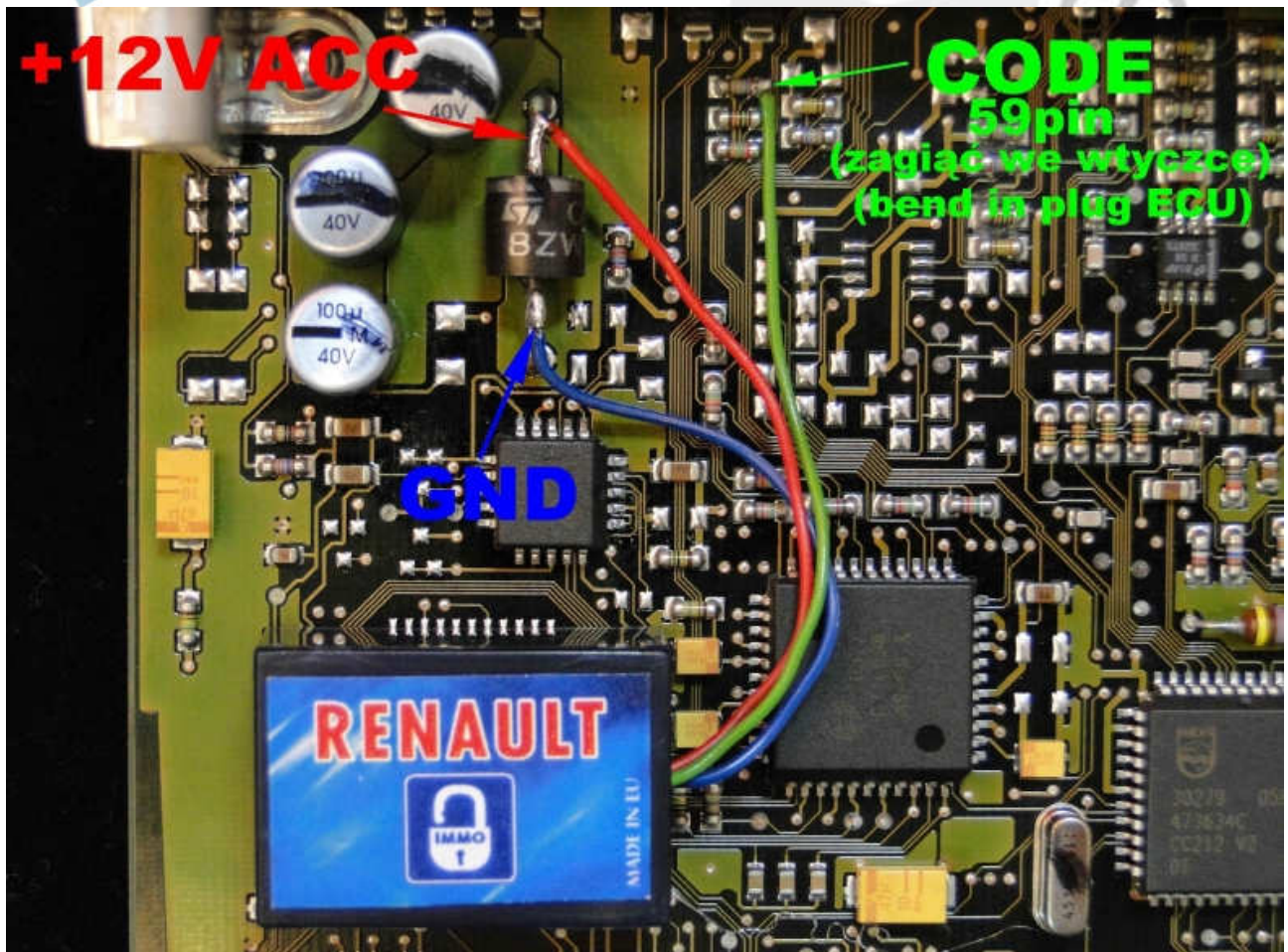
**1,9 Dti plug**



**Renault Megane 1,9 Dti**

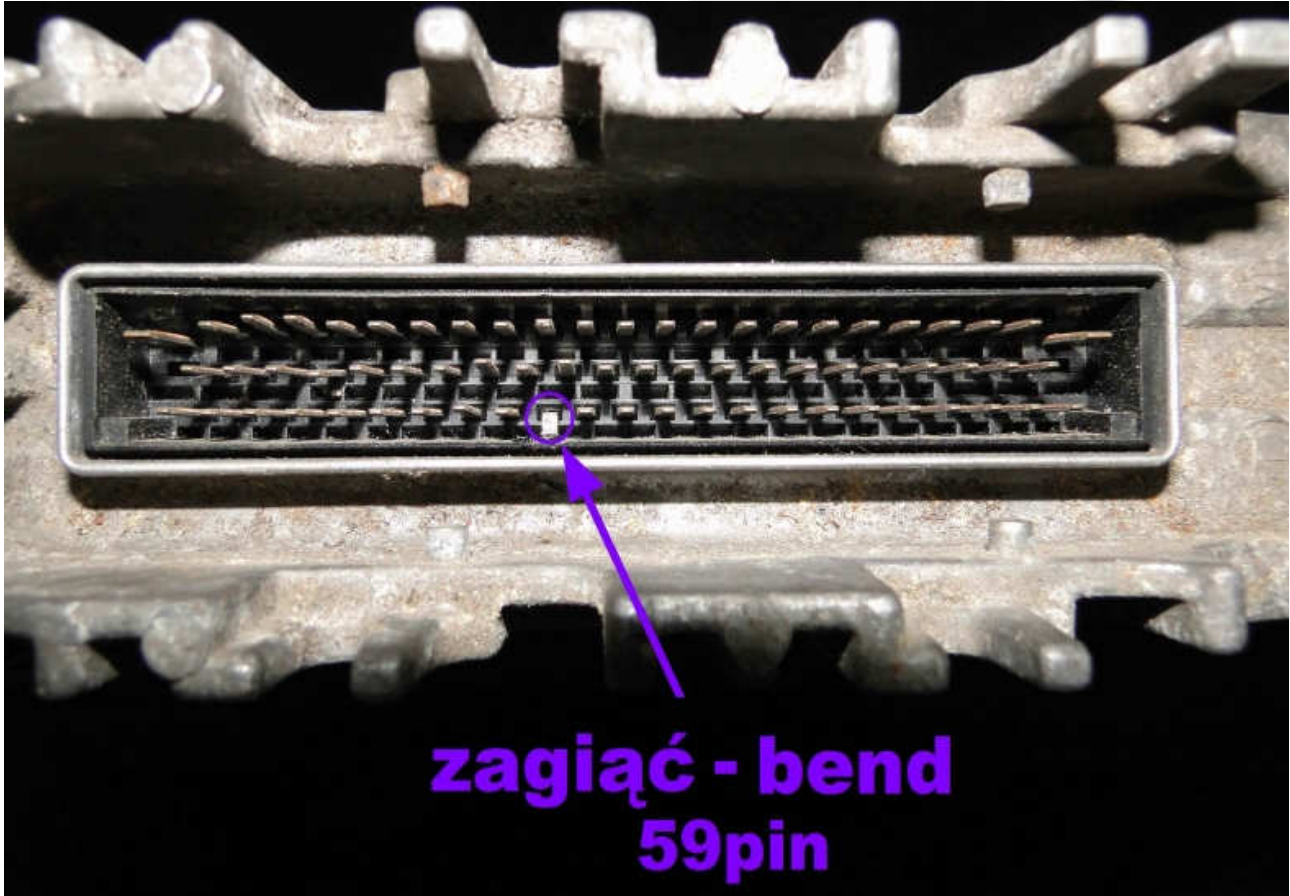
- 1) Run the reading of the EPROM 24C02**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**





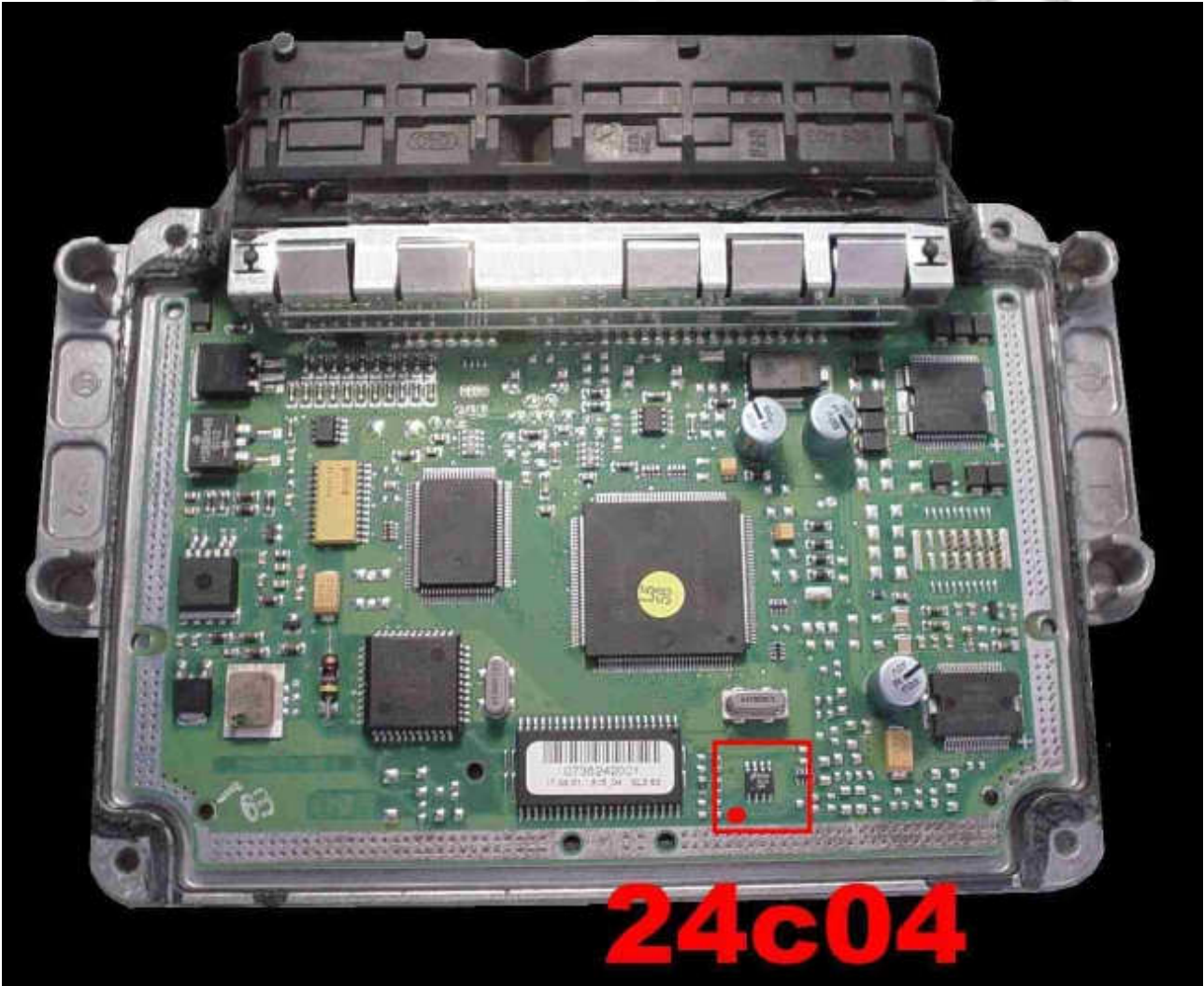
**The immo line of emulator connect to the 59 pin on the driver.  
GND and ACC connect to diode in the driver**

**Cut off this pin 59 from ECM.**





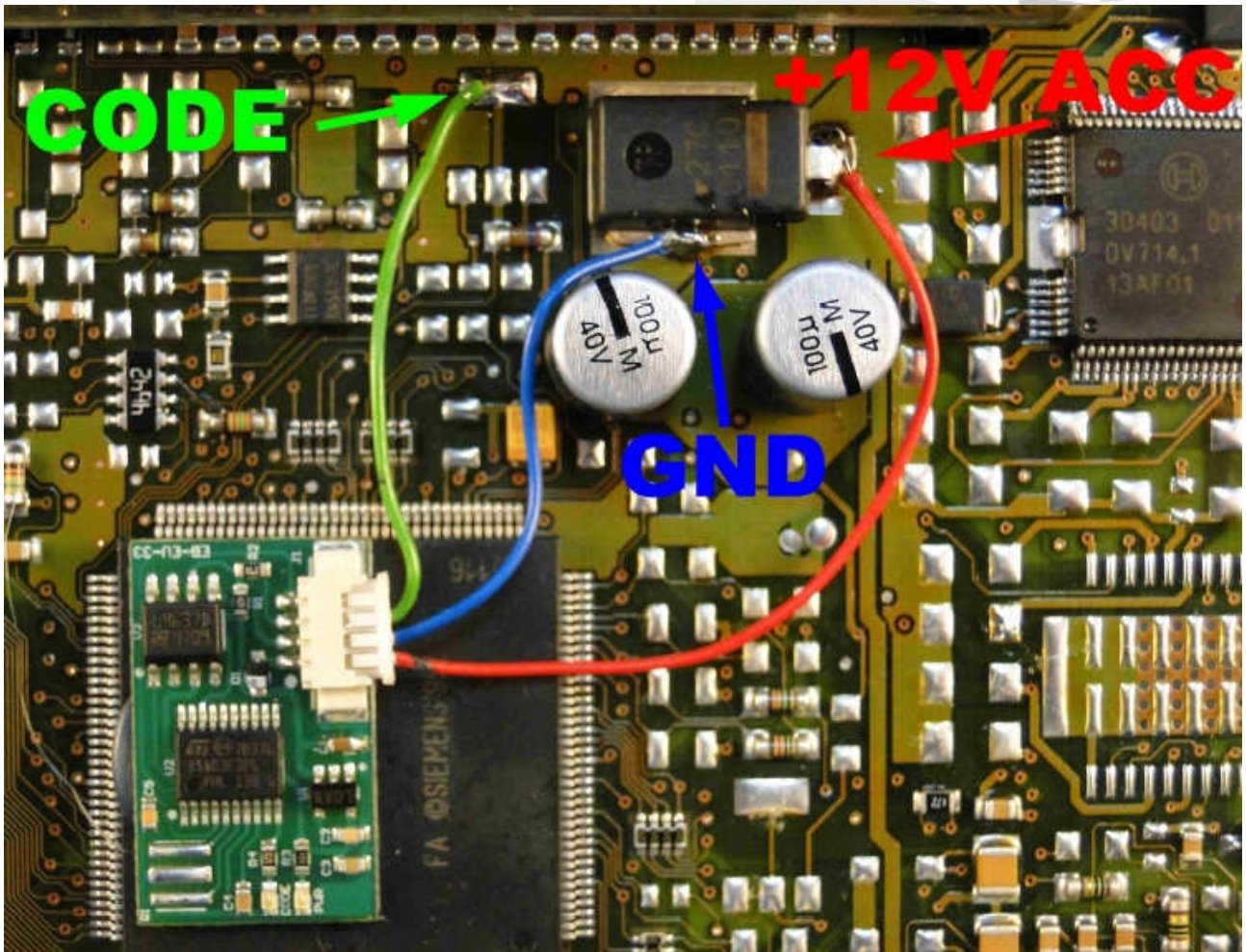
**1,9 DTi 2 plugs**



**Renault Megane 1,9 DTi**

- 1) Run the reading of the EPROM 24C04**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



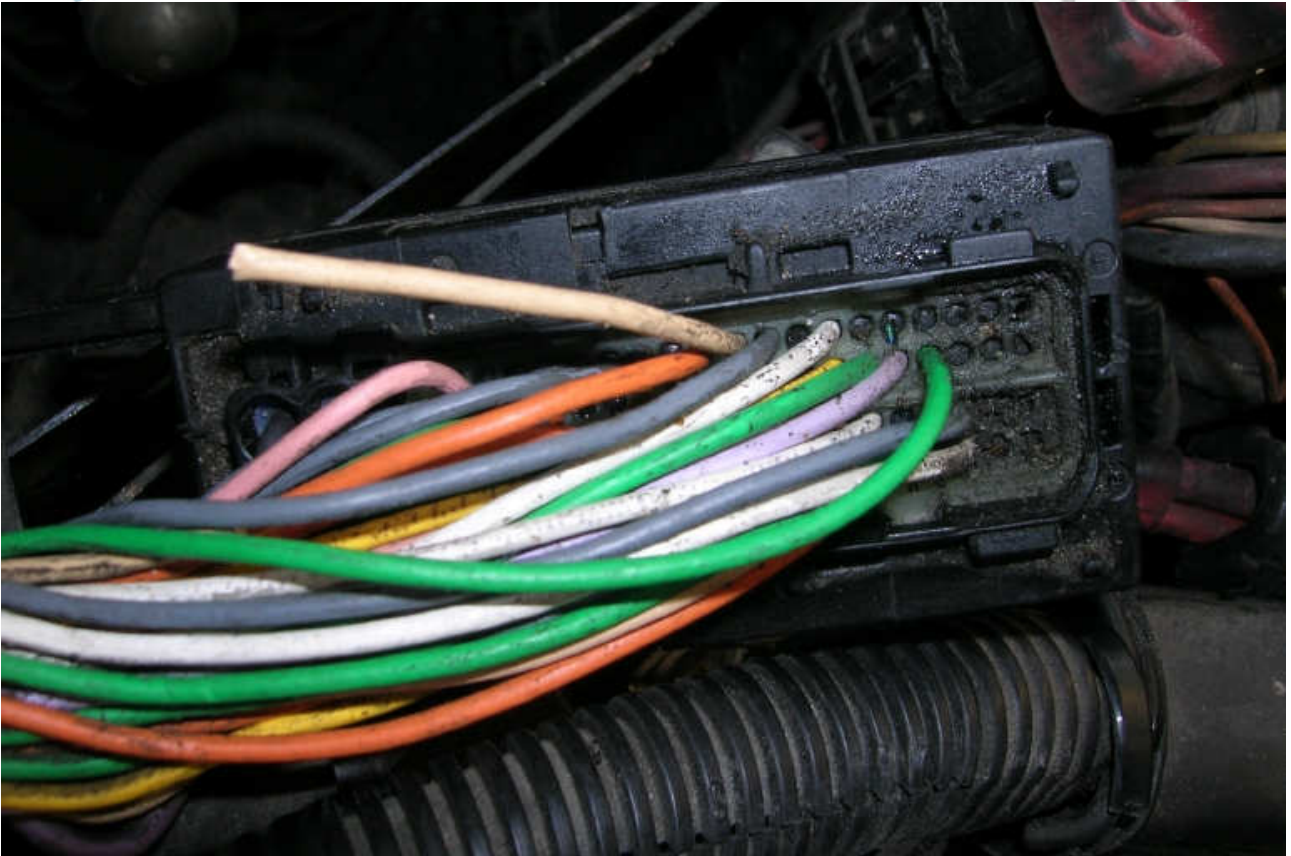


### Connecting emulator in the driver:

**GND:** Pin 4,5

**ACC:** Pin 81

**Immo line:** Pin 15



**→ Cut off pin 15 from wiring!!!**

**ECU**

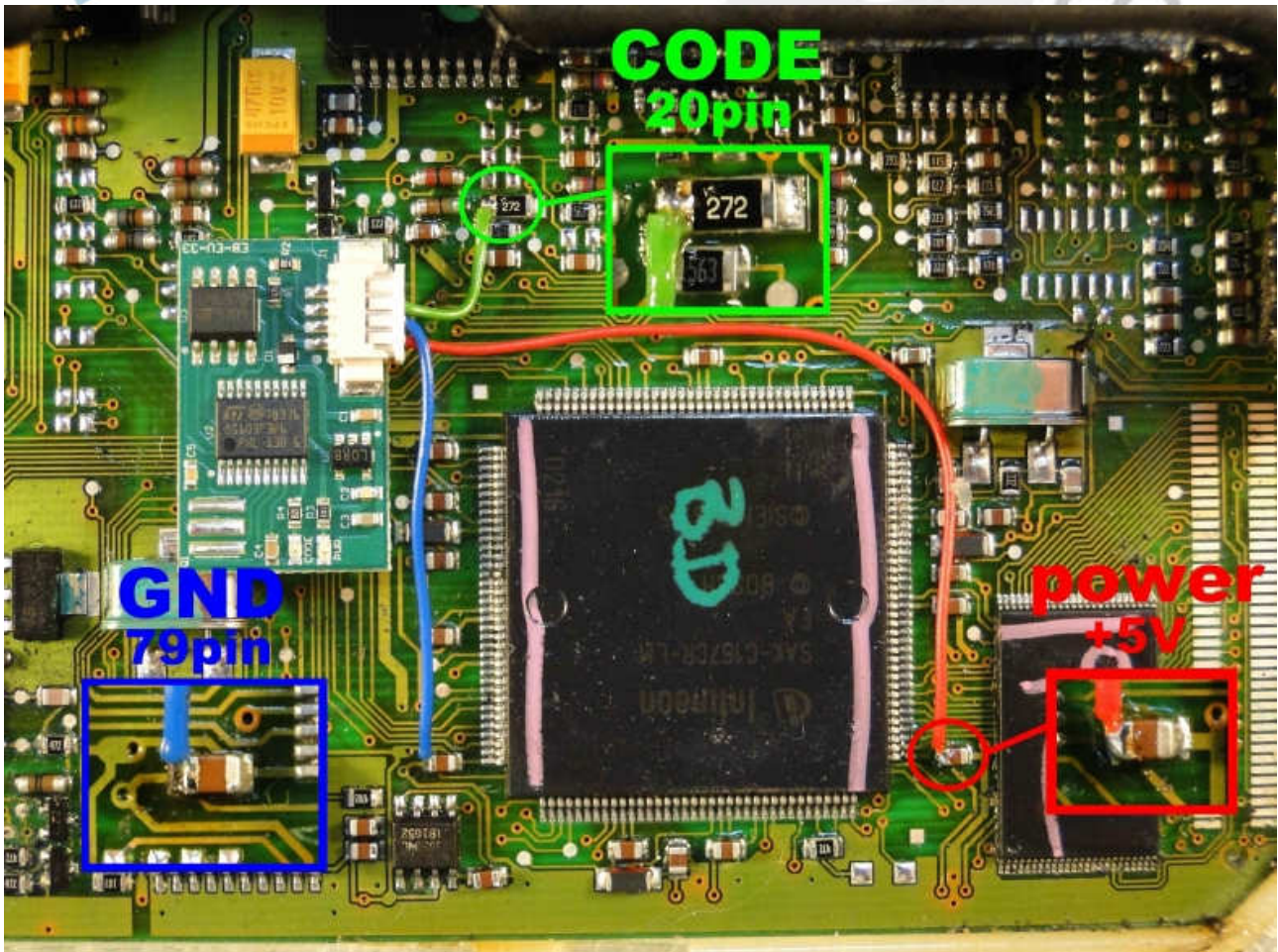
**1,9 Diesel DCU3**



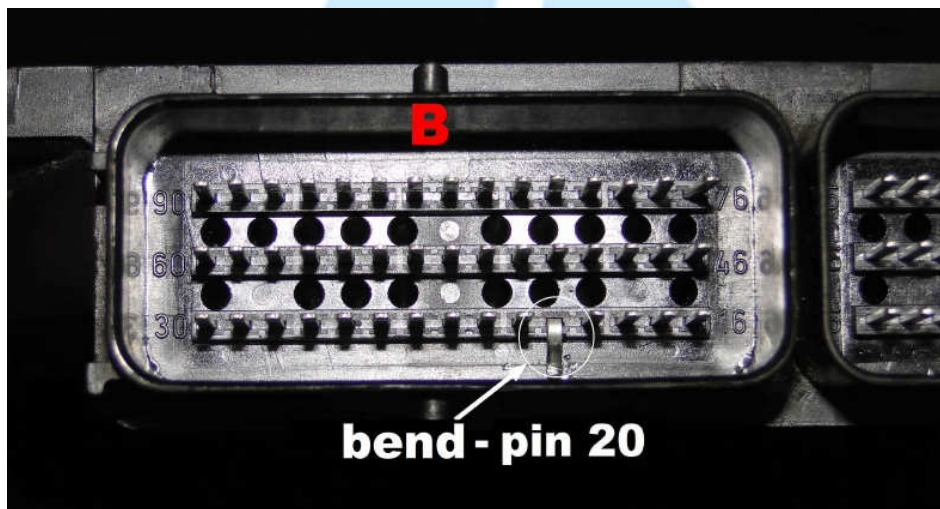
**Renault Kango 1,9 Diesel 2001**

- 1) Run the reading of the EPROM 95080**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



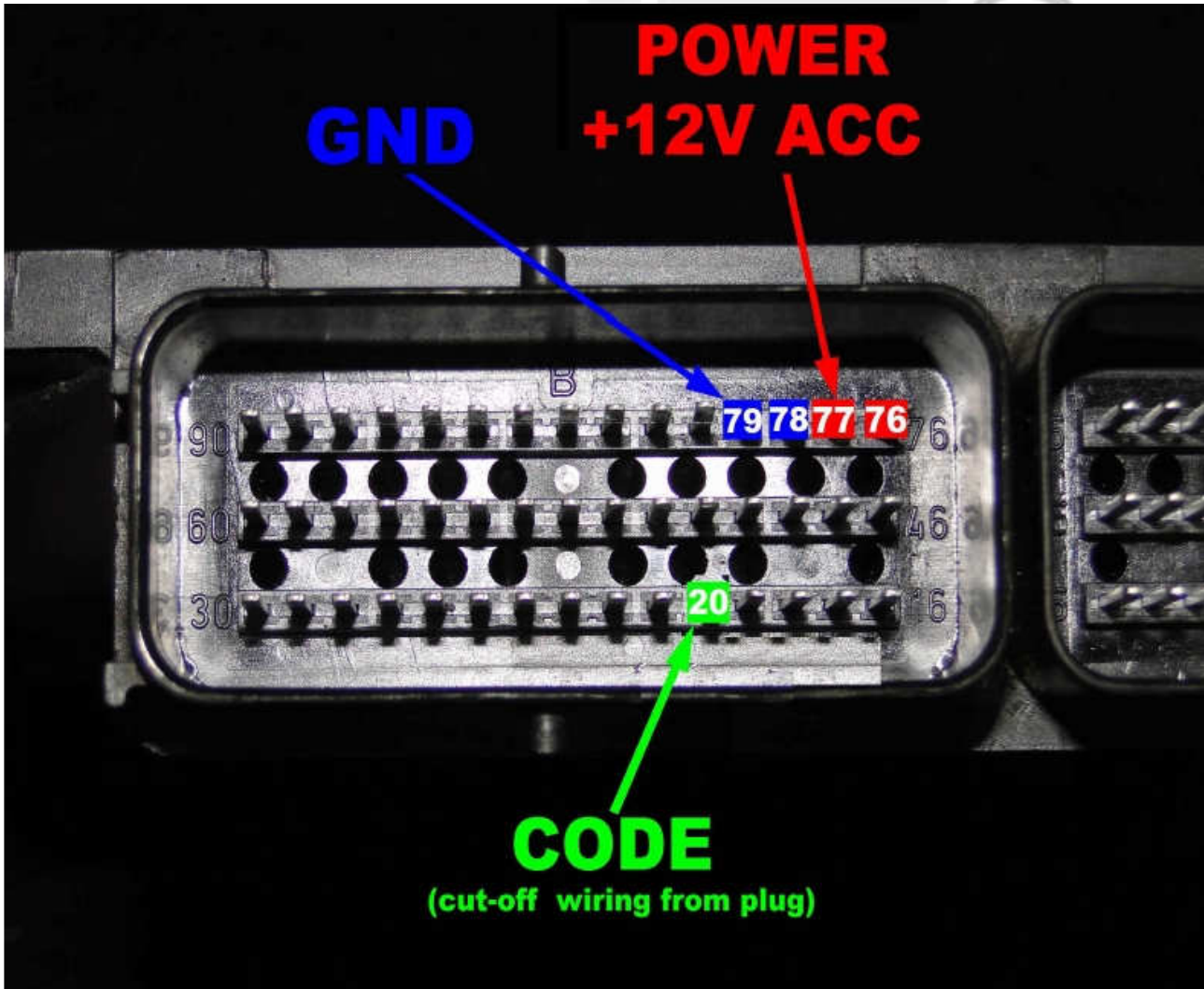


**Power +5V from capacitor**  
**GND – Pin79**  
**Code – Pin20**



**→ Pin 20 must be bend in plug or cut off from the car wiring**

**Connecting emulator to plug ECU (1,9 Diesel DCU3)**



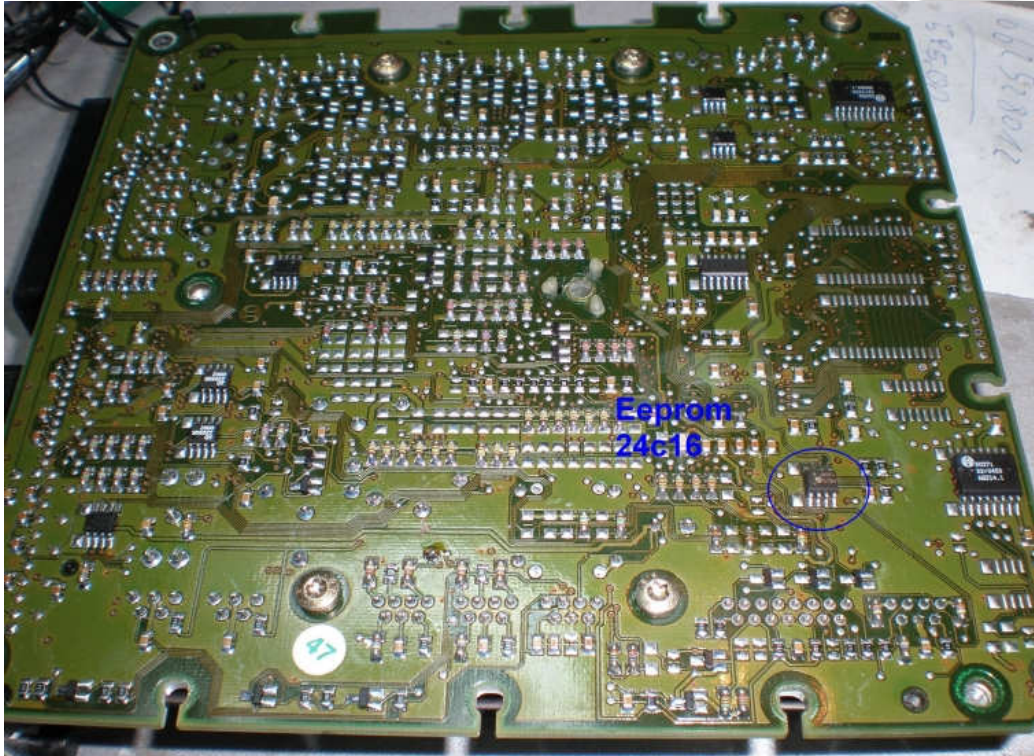
**Power +12 pin 76 or 77**

**GND – Pin 78 or 79**

**Code – Pin20 (cut-off wiring from plug ECU)**



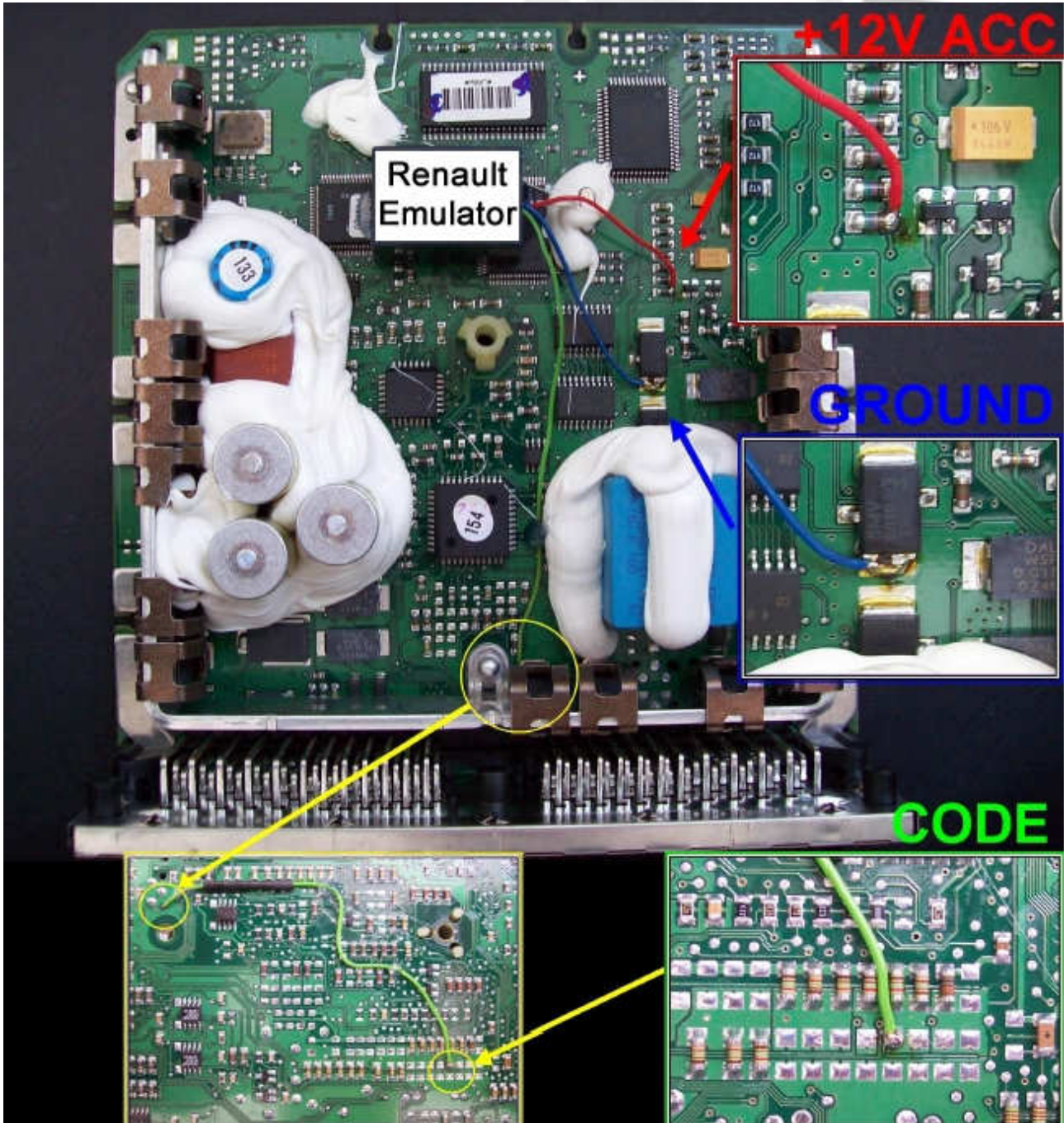
**Masot 2,8 Td**



- 1) Run the reading of the EPROM 24C16**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



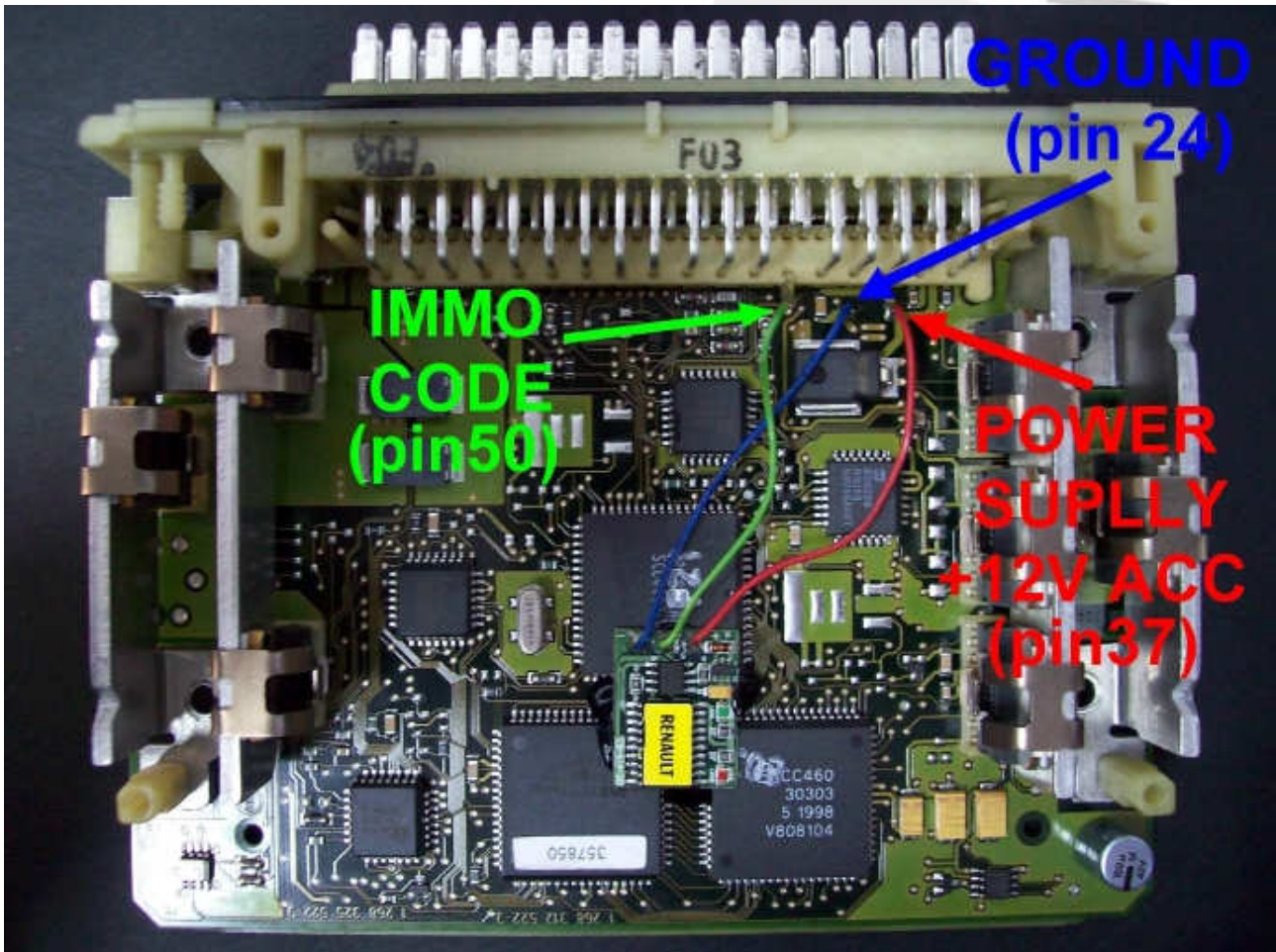
Connecting emulator in the driver:





→ **Cut off pin code of the driver from the wiring!!!**





→ Cut off pin 50 of the driver from the wiring!!!

Connecting the emulator:

**ACC** - pin 37

**Ground** - pin 24

**Immo** line - pin 50

- 1) Run the reading of the EPROM 24C02**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



## **SUZUKI WITH MEMORY OKI**

ECM with memory OKI read as 93lc56 and X24C01

Emulator immo to suzuki cars replaces damaged immobilizer or the car key.

It function after made changes in memory content of Engine Control Module ECM.

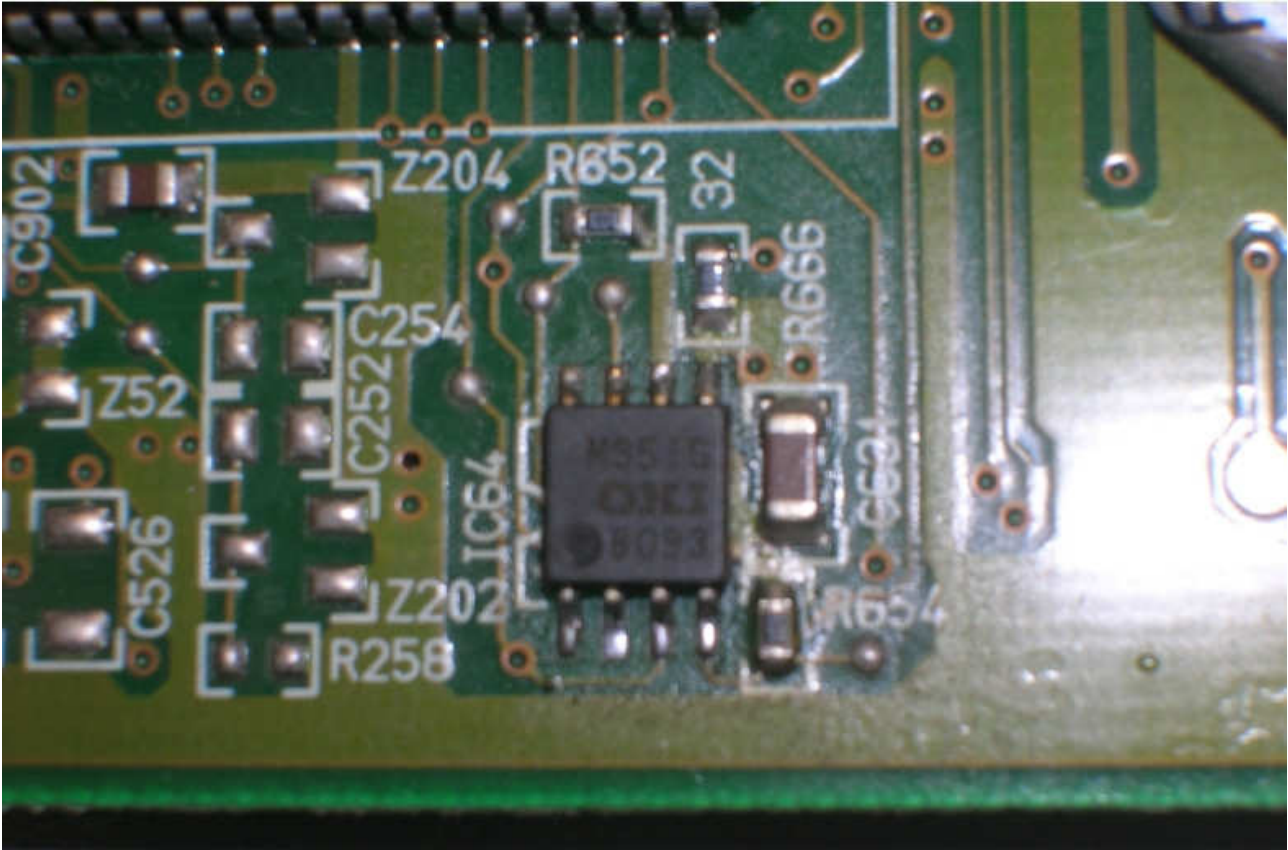
In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service.

Due to a low cost you can leave it in the car instead of buying a new immo or making car keys duplicate. There is a possibility of using it as the additional security!!!

Two LEDs indicating:

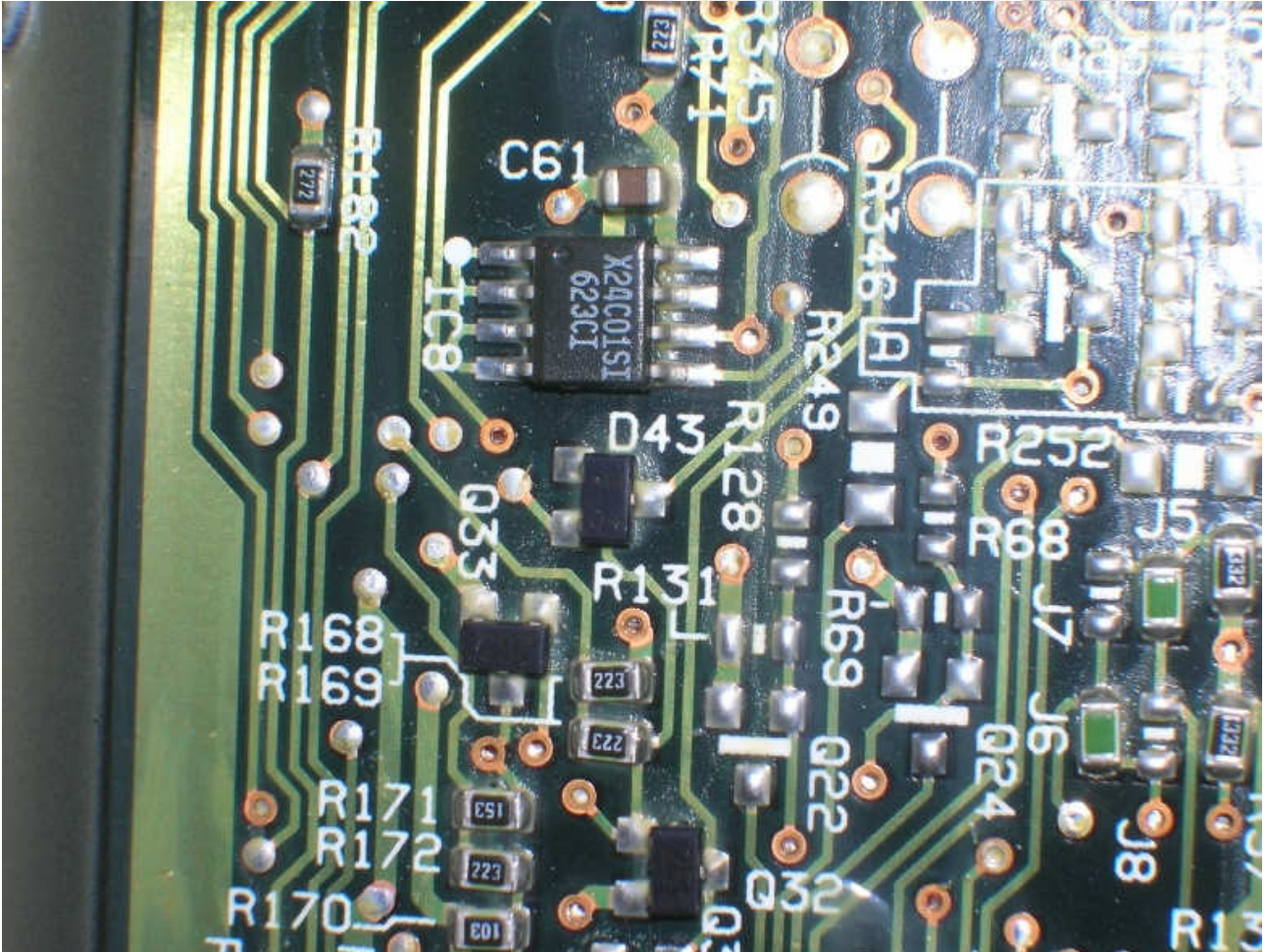
**Green** - power

**Red** - transmission (after adjusting it blinks each 5 seconds)).



**In ECM find memory eeprom OKI, read and type as 93lc56.**

- 1) Run the reading of the EPROM OKI 93lc56**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**

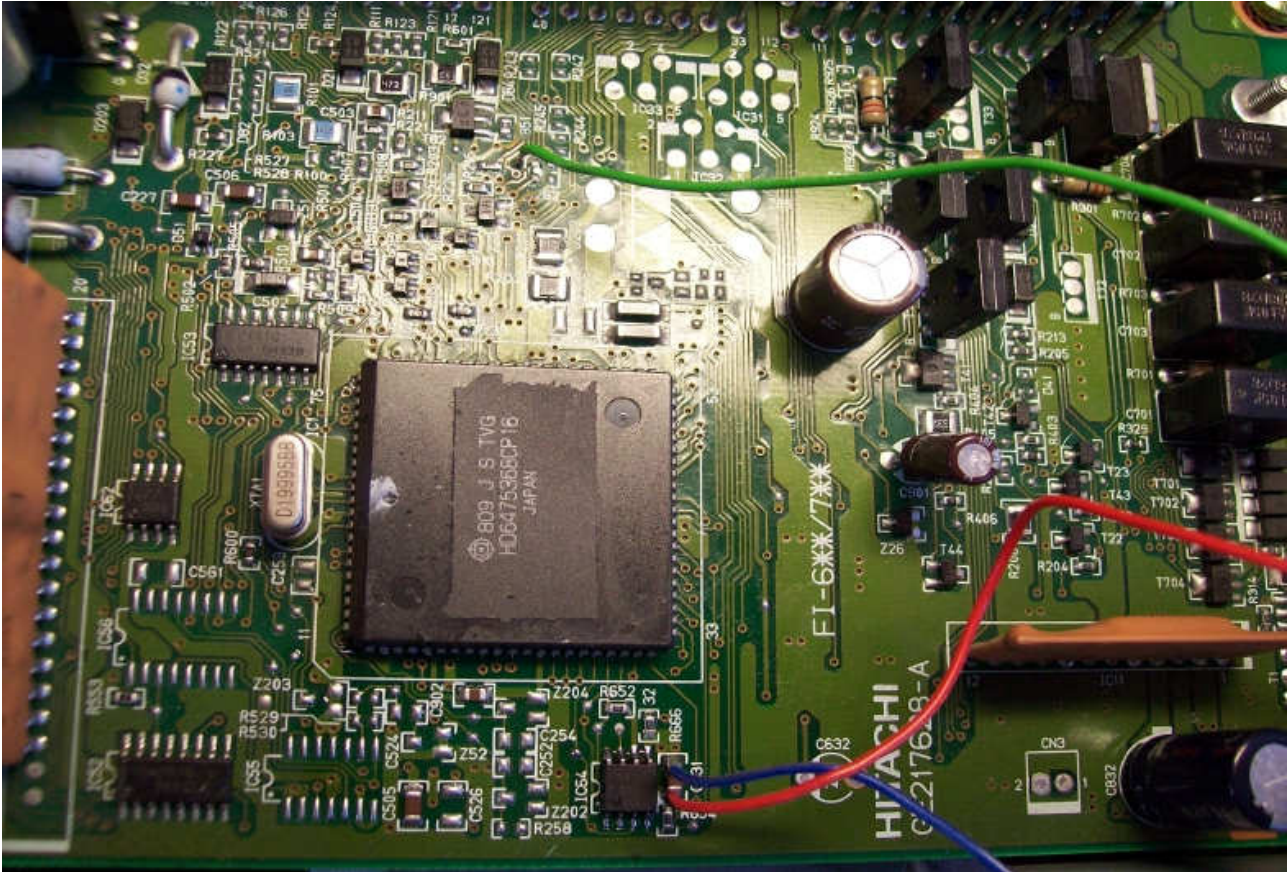


**In ECM find memory eeprom X24C01.**

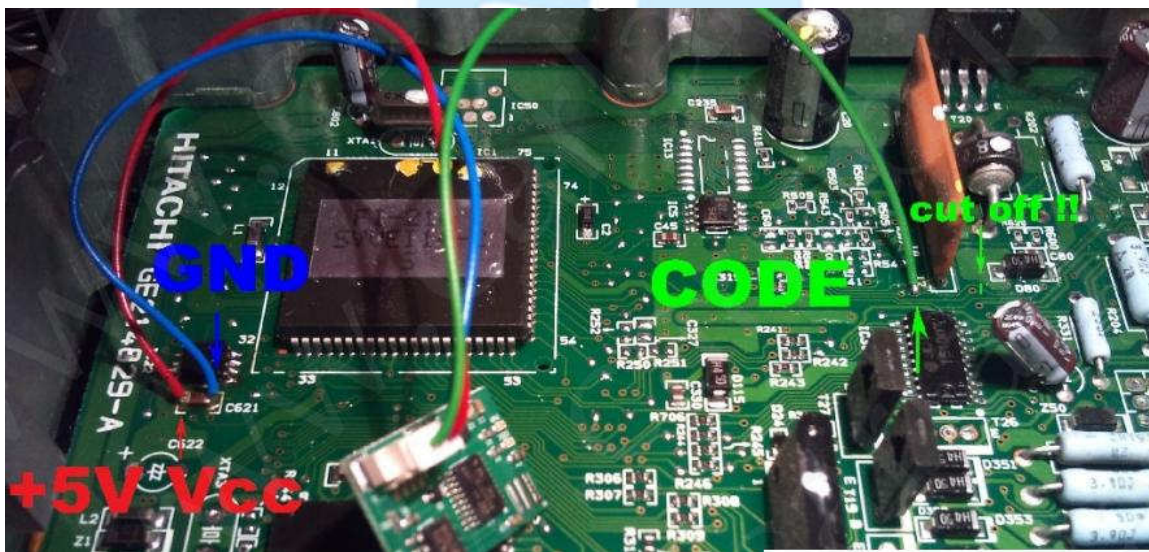
- 1) Run the reading of the EPROM X24C01**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



Example of connecting:

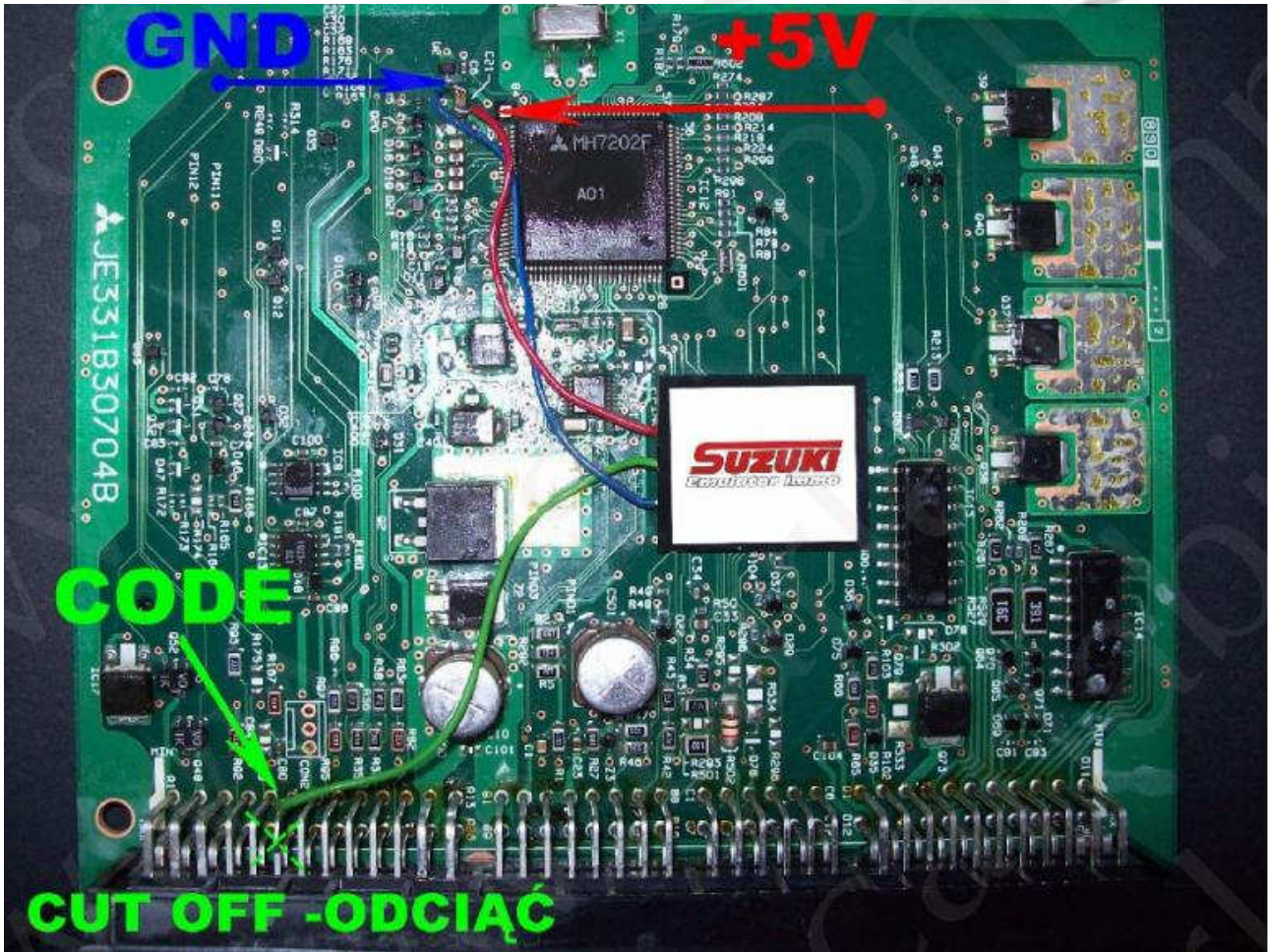


Example of connecting:

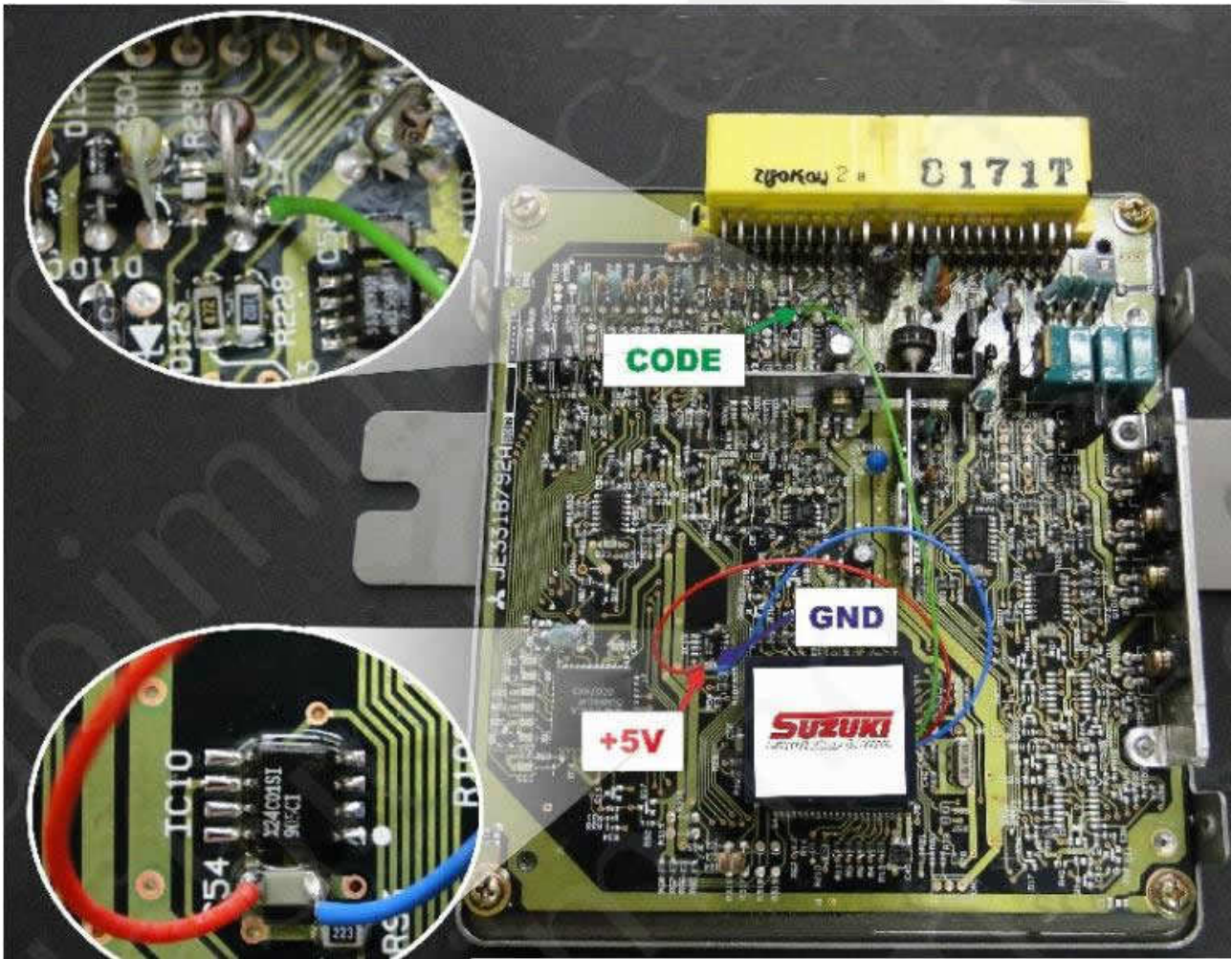




Example of connecting:

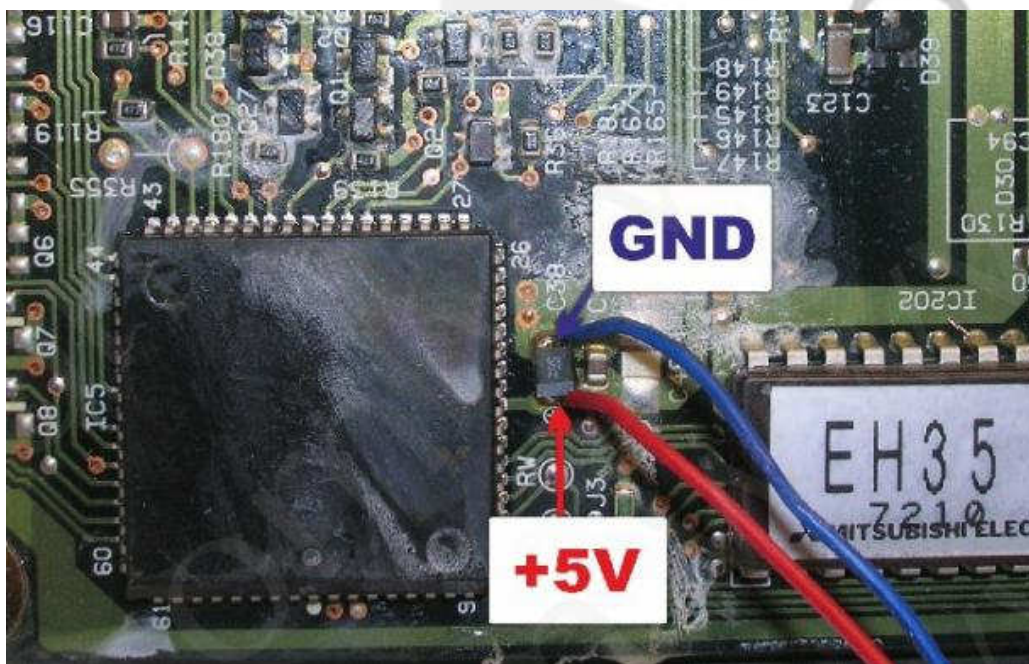
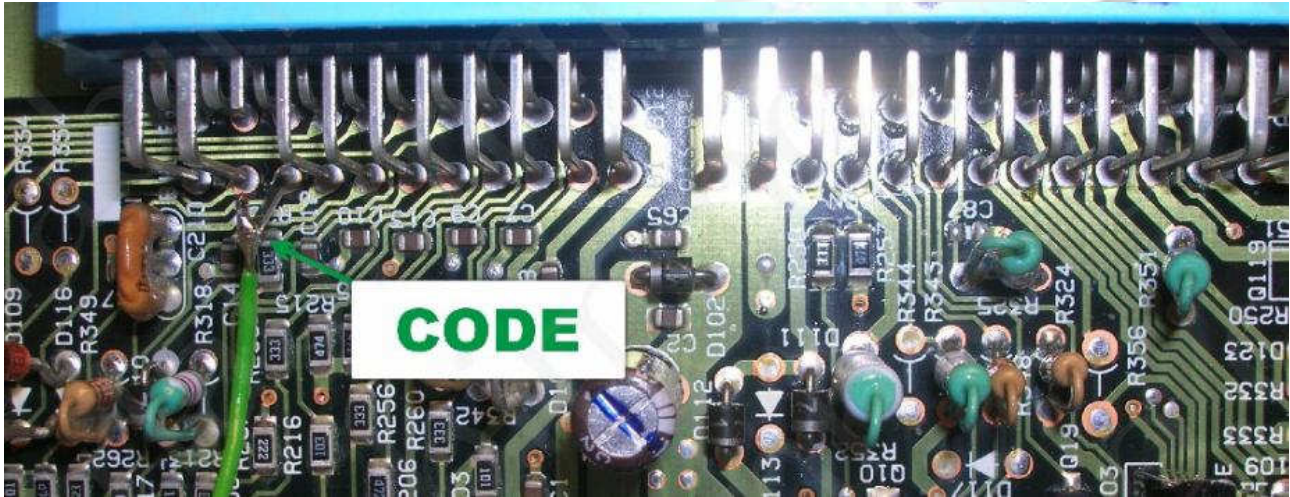


Example of connecting:





Example of connecting (Version Plug blue):



**Immo line e.g. plug B pin 15**

**In different types of ECM this line can be on the other pins (check out by the multimeter the way between ECM pin and 9 pin of the diagnostic plug OBD – 16pins).**

**Power supply 5V from capacitor near the memory.**

Before connecting the driver, emulator must be precisely isolated by the isolation strap.

## Citroen, Peugeot - CAN

Emulator immo to Citroen-Peugeot Can cars replaces damaged immobilizer or the car key.

It is necessary to made changes in memory content of Engine Control Module.  
In case of losing the car keys or a car burglary it enable to drive off from the road to the car service.

Due to a low cost, you can leave it in the car instead of buying a new immo or making car keys duplicate.

There is a possibility of using it as the additional security!!!

Two LEDs indicating:

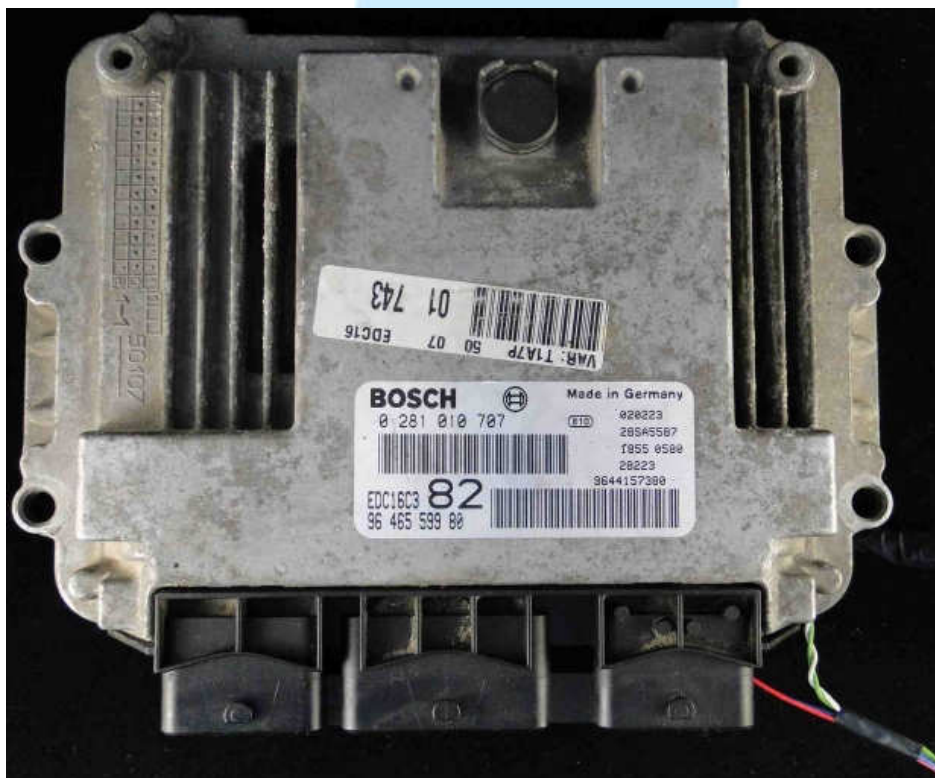
**white** – power

**blue** – transmission

(- adjusting to the driver – blinking 0,1 sec

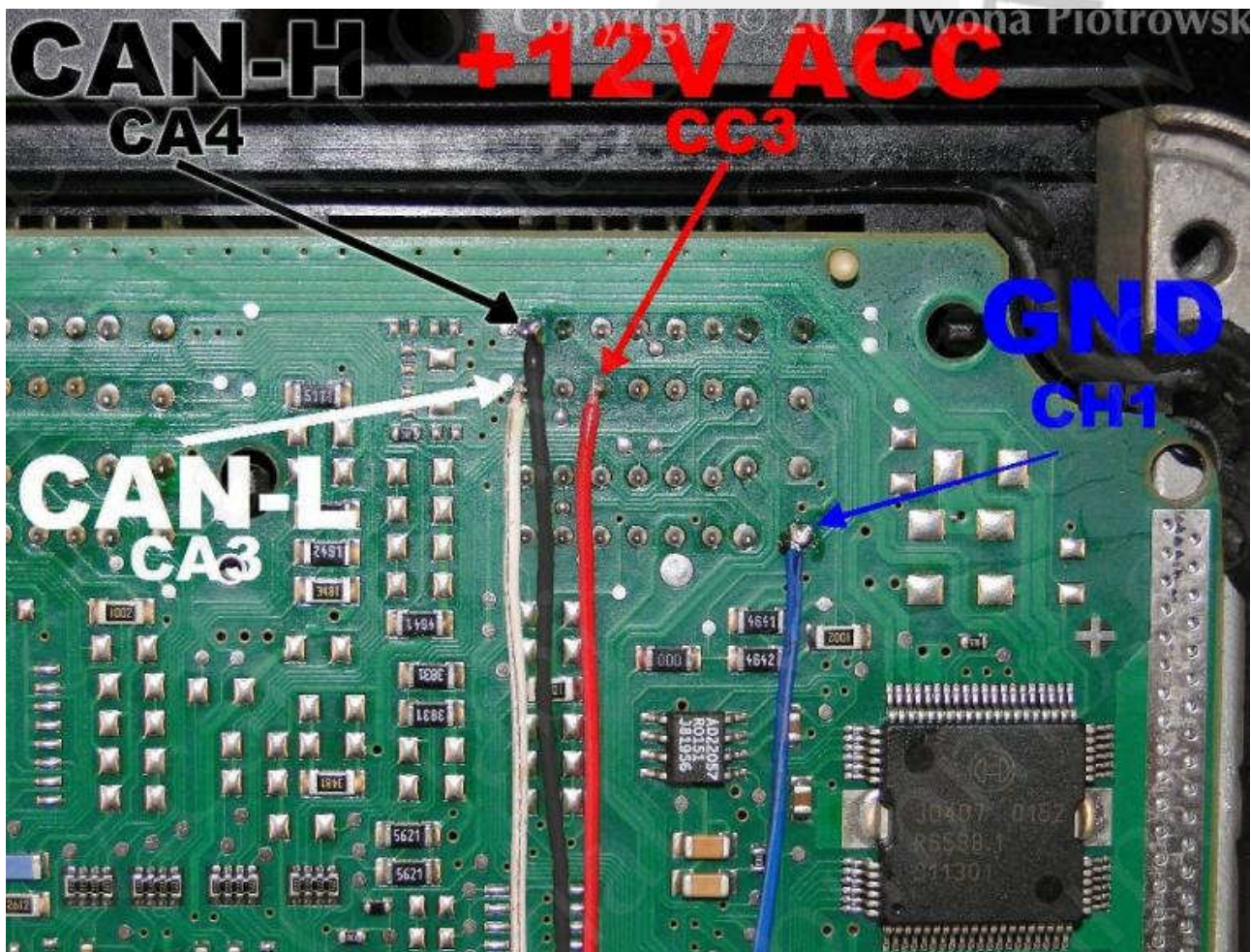
- after adjusting – 2 seconds is light on and then will stop for 0,1 sec)

## ECU EDC16 - 1,4 HDI - 1,6 HDI





- 1) Run the reading of the EPROM 95160 or 95320
- 2) Process the file with the software IMMO Universal Emulator
- 3) Write with the new file generated

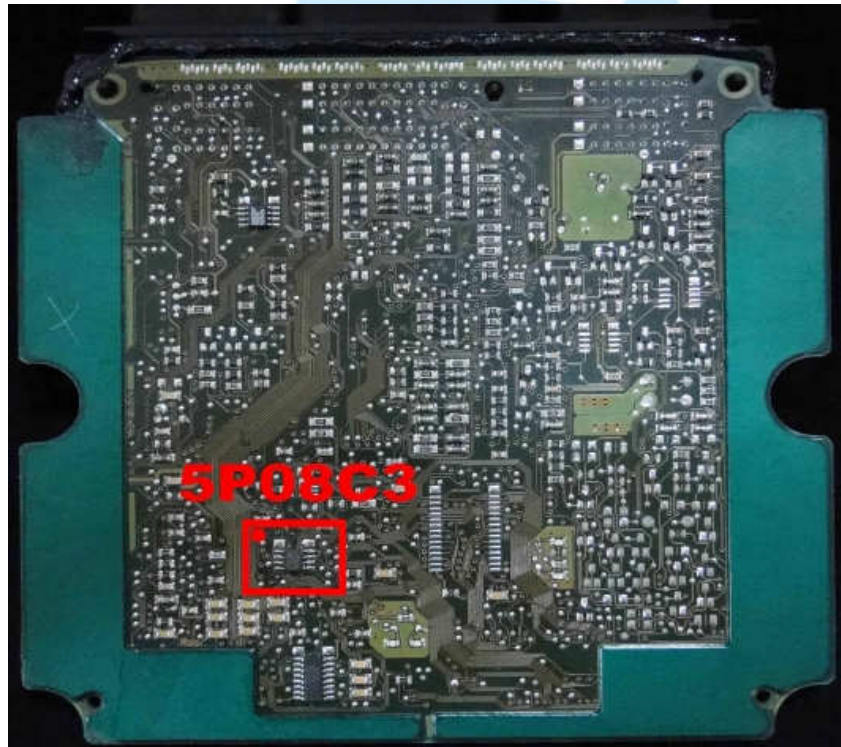


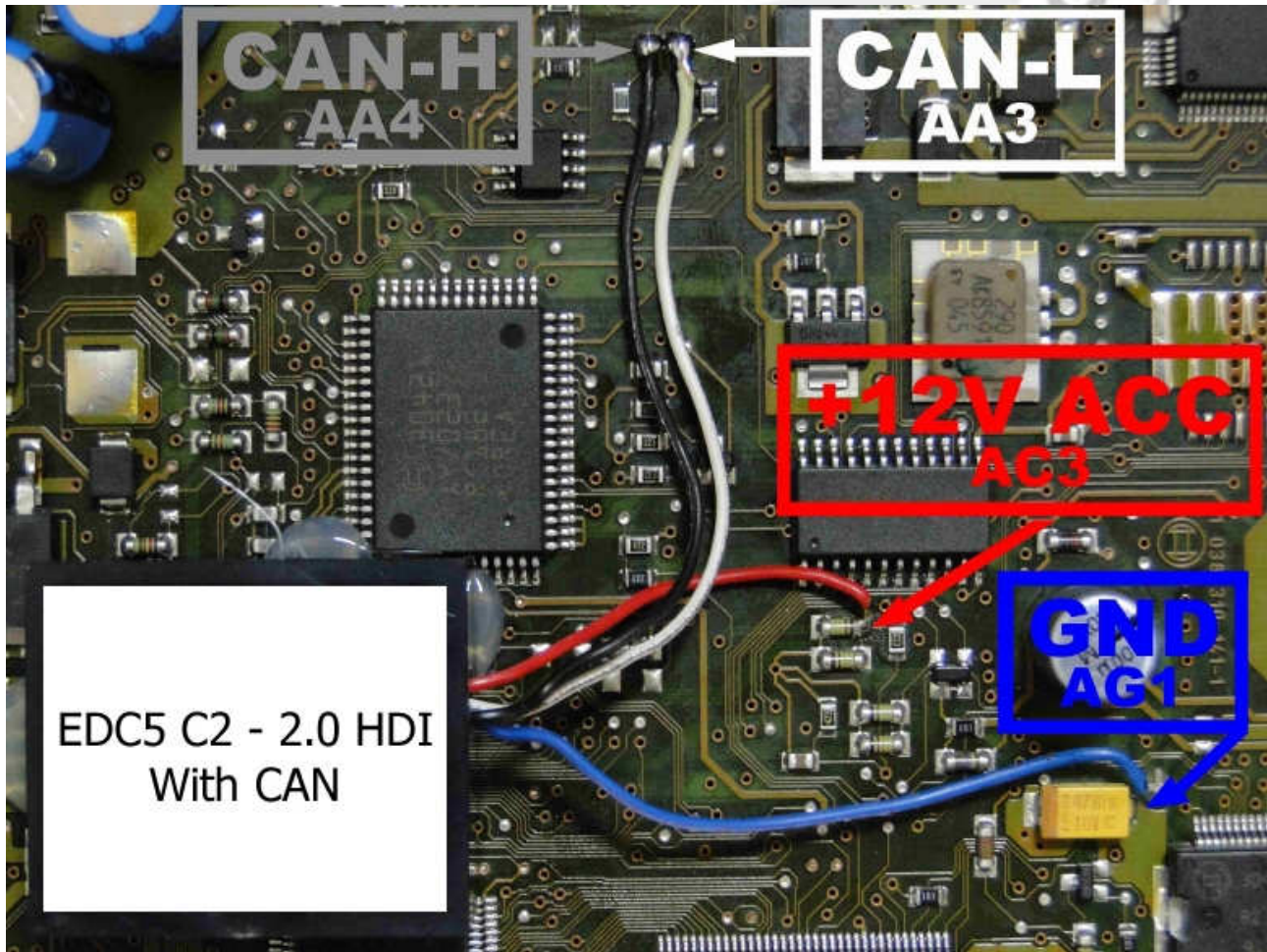
**+12V ACC: CC3**  
**GND: CH1**  
**CAN-H: CA4**  
**CAN-L: CA3**

**Before connecting the driver, emulator must be precisely isolated by the isolation strap.**



**ECU EDC15C2 with CAN 2,0 HDI**





**+12V ACC:** Pin AC3  
**GND:** Pin AG1  
**CAN-H:** Pin AA4  
**CAN-L:** Pin AA3

- 1) Run the reading of the EPROM 5P08C3
- 2) Process the file with the software IMMO Universal Emulator
- 3) Write with the new file generated

## **Mercedes ESL electronic emulation of the steering column lock**

Emulators electronic lock of the steering column allow you to check the ignition switch with the key by replacing damaged ESL.

They also allow emergency drive off from the street in case of damage of the steering column lock or damage of the car after attempted burglary.

Due to a low cost you can leave it in the car instead of buying a new steering column lock.

There is a possibility of using it as the additional security.

Two LEDs indicating:

**Green** – power

**Red** – Transmission (after adjusting it blinks each 5 seconds)

**ESL emulator works with electronic ignition switch of Mercedes in older models (W202, W208, W210) and allows you to check new (W203, W209, W211, Vito 639).**

The emulator can also be used to verify the original electronic ignition switch and steering column lock.

**WARNING!!! Due to possible construction changes of the cars, before connecting the device check signals by multimeter on the ECM plug.**

**IT does not replace the new bolts on the NECu!**



**The first type: W202, W208, W210**



**The second type: W203, W209, W211, Vito 639**



**Works with ignition switches numbered:**



**208 545 00 08**

**208 545 02 08**

**210 545 00 08**

**210 545 02 08**

**208 545 01 08**

**208 545 03 08**

**210 545 01 08**

**210 545 03 08**

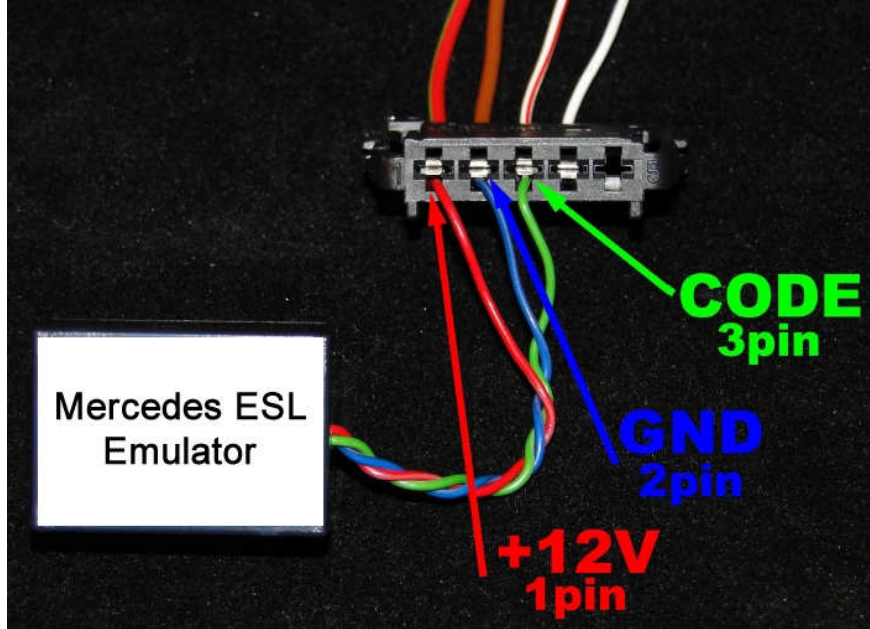


**639 545 05 08**

**Self-learning code of the electronic ignition  
Connect it up and it works.**

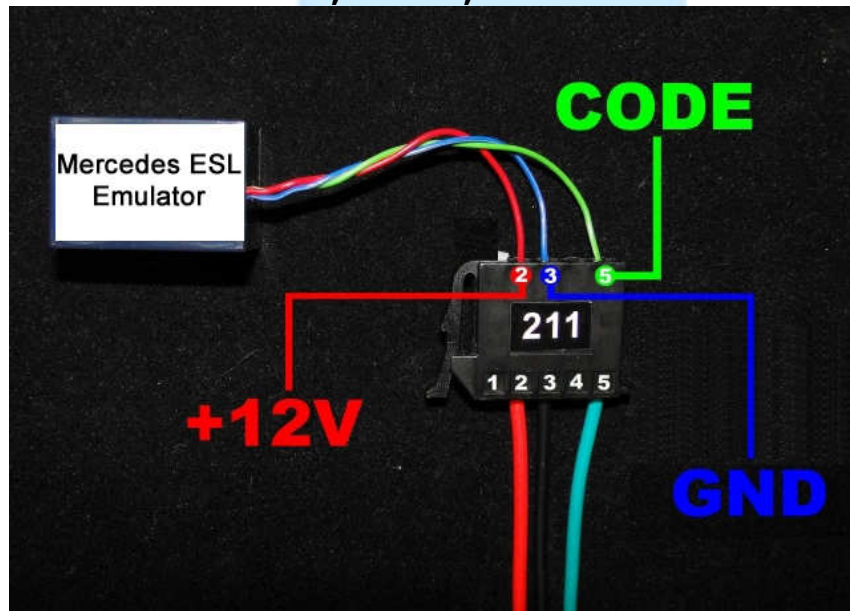


### Connecting to Mercedes-Benz W202, W208, W210



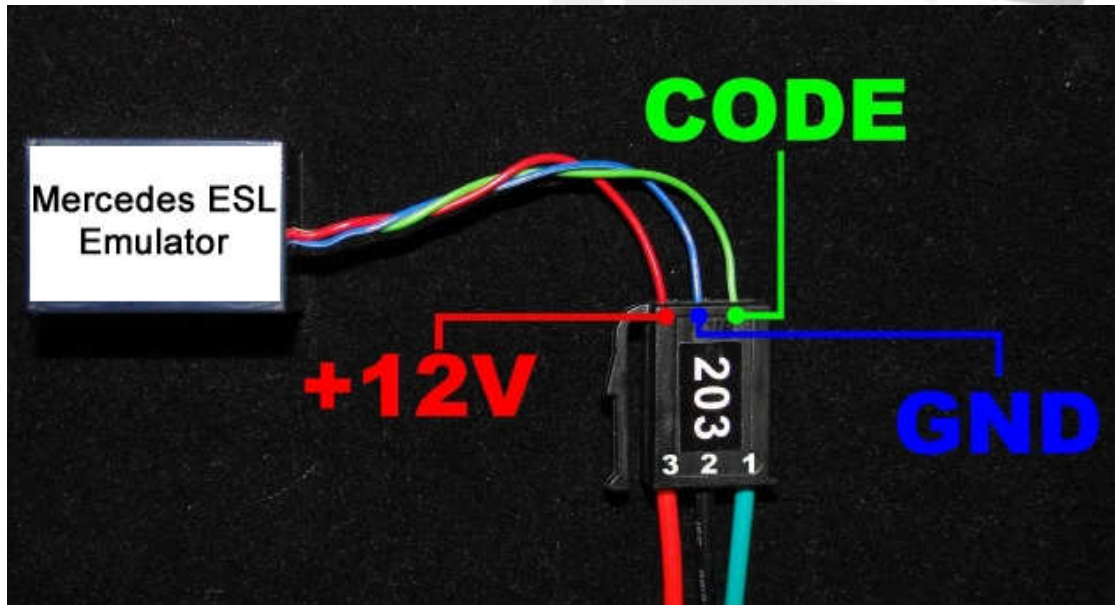
**Code = pin 3    Ground = pin 2    +12V = pin 1**

### Connecting to Mercedes-Benz W209, W211, Vito 639



**Code = pin 5    Ground = pin 3    +12V = pin 2**

## Connecting to Mercedes-Benz W203



Code = pin 1    Ground = pin 2    +12V = pin 3

## VW EDC16 with CAN 1,9 - 2,0 TDI

Emulator immo Audi, Seat, Skoda, VW - TDI EDC16 with CAN (immo OFF, immo ON)

Two LEDs indicating:

**white** – power

**blue** – transmission

(- adjusting to the driver – blinking 0,1 sec

- after adjusting – 2 seconds is light on and then will stop for 0,1 sec)

Program selection is effected by soldering properly jumpers.

Works in vehicles with 2 plug engine control unit:





**USE:**

EDC16 with CAN 1,9 - 2,0 TDI = IMMO OFF

EDC16 with CAN 1,9 - 2,0 TDI = IMMO ON (in some drives it does not turn back immo)

Tested on drives:

0 281 012 XXX

0 281 012 113 Audi A4 2,0 TDI 2008

0 281 012 545 Audi 1.9 TDI 2007

0 281 012 546 Audi 1,9 TDI 2006

0 281 012 654 Audi 2,0 TDI 2005

Replaces Damaged immobilizer, instrument cluster or the car key. It removes immobilizer from the computer, connect it once to the diagnostic plug OBD and it works.

Cable color marking:

Red = Power

Blue = GND

White = CAN L

Black = CAN H

Check before use through the diagnostic plug OBD if diagnosis with ECM is a stable.

```
Windows Based VAG/VAS Emulator
Version: Beta 0.81
www.Ross-Tech.com

Diagnostic Trouble Code Report

Thursday, 01 September 2005, 16:53:36

Control Module Part Number: 074 906 018 N
Component and/or Version: G000SG 2529
Software Coding: 00002
Work Shop Code: WSC 02743

s Found:

Engine Control Module Blocked by Immobilizer

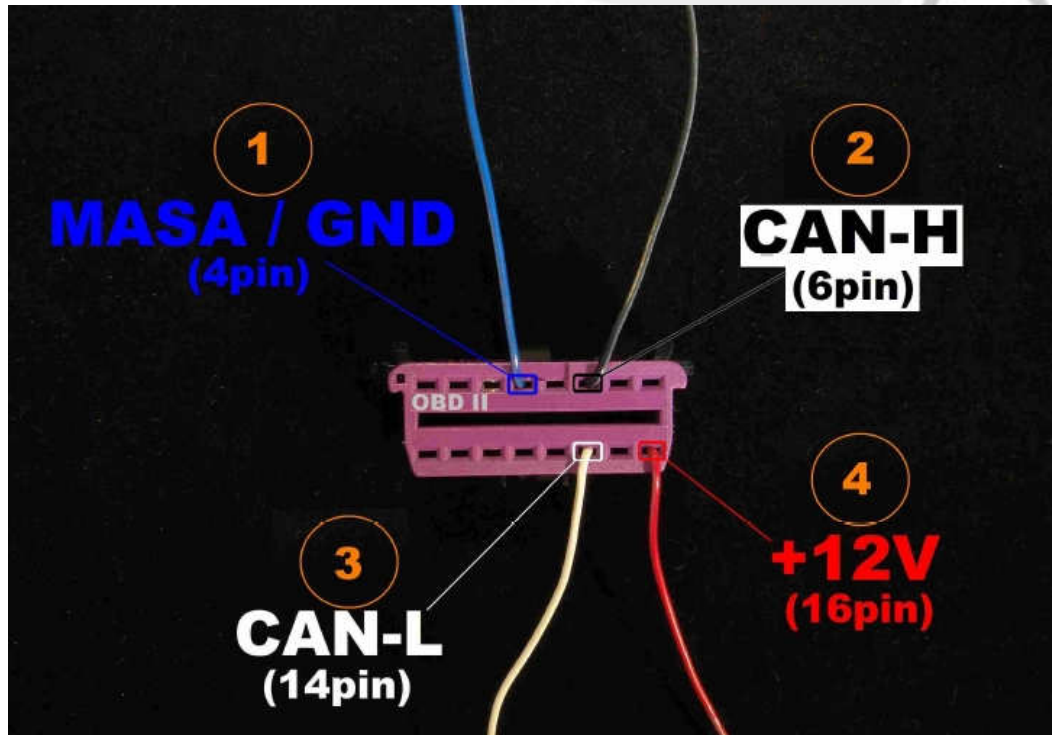
Quantity Adjuster (N146): Lower Limit Reached
- - Intermittent

Sensor for [??] (G149): Electrical Malfunction
- - Intermittent
```

**IF we are connecting by any of the diagnostic interface to the ECM and there is a problem:**

“Engine Control Module Blocker by Immobilizer” or car does not start, then we can use emulator VW EDC16 with CAN 1,9 - 2,0 TDI.

### Wiring connections sequence



Wiring connections sequence:

1. GND = pin 4
2. CAN-H = pin 6
3. CAN-L = pin 14

**→ Turn ignition switch ON (II-Position)**

4. ACC = pin 16

The wires must be connected precisely and in sequence as in instruction. After connecting the last red cable to pin 16, blue LED on the emulator blinks and after a while will be flashing informing about running of the transmission. Led is Blinking fast, if after about 20 seconds it will blink slowly then disconnect emulator.

**Emulator VW EDC16 with CAN 1,9 - 2,0 TDI is a single use and it can be used only in one car.**

## VW EDC16 with CAN 2,7 – 3,0 TDI

Emulator immo Audi, Seat, Skoda, VW - TDI EDC16 with CAN 2,7 - 3,0 (immo OFF, immo ON)

Two LEDs indicating:

**white** – power

**blue** – transmission

(- adjusting to the driver – blinking 0,1 sec

- after adjusting – 2 seconds is light on and then will stop for 0,1 sec)

Program selection is effected by soldering properly jumpers.

Works in vehicles with 2 plug engine control unit:





**USE:**

EDC16 with CAN 2,7 - 3,0 TDI = IMMO OFF

EDC16 with CAN 2,7 - 3,0 TDI = IMMO ON (in some drives it does not turn back immo)

Tested on drives:

0 281 012 XXX

0 281 012 270 Audi A6 Quattro 3,0 TDI

0 281 013 XXX

0 281 013 177 Audi A6 2,7 TDI 2007

0 281 014 XXX

0 281 014 384 Audi A6 2,7 TDI 2007

Replaces Damaged immobilizer, instrument cluster or the car key. It removes immobilizer from the computer, connect it once to the diagnostic plug OBD and it works.

Cable color marking:

Red = Power

Blue = GND

White = CAN L

Black = CAN H

Check before use through the diagnostic plug OBD if diagnosis with ECM is a stable.

```
Windows Based VAG/VAS Emulator
Version: Beta 0.81
www.Ross-Tech.com

Diagnostic Trouble Code Report

Thursday, 01 September 2005, 16:53:36

Control Module Part Number: 074 906 018 N
Component and/or Version: G000SG 2529
Software Coding: 00002
Work Shop Code: WSC 02743

s Found:
Engine Control Module Blocked by Immobilizer

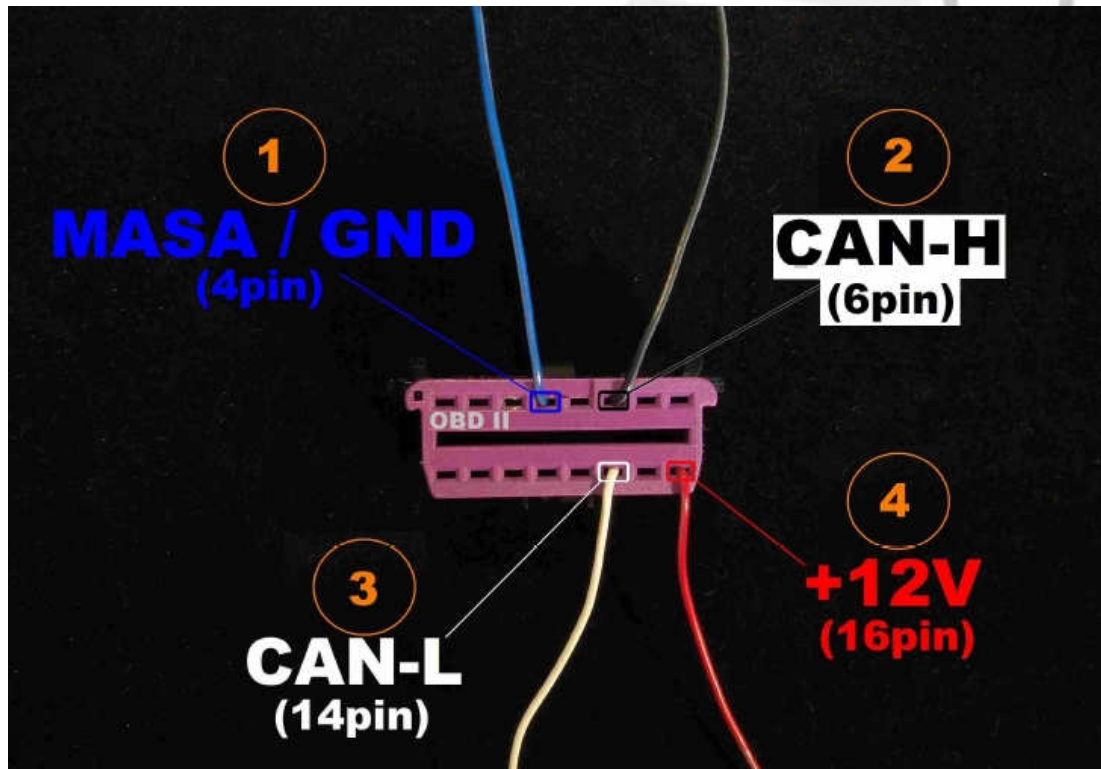
Quantity Adjuster (N146): Lower Limit Reached
- - Intermittent

Sensor for [??] (G149): Electrical Malfunction
- - Intermittent
```

**IF we are connecting by any of the diagnostic interface to the ECM and there is a problem:**

“Engine Control Module Blocker by Immobilizer” or car does not start, then we can use emulator VW EDC16 with CAN 2,7 - 3,0 TDI.

### Wiring connections sequence



Wiring connections sequence:

1. GND = pin 4
2. CAN-H = pin 6
3. CAN-L = pin 14

**→ Turn ignition switch ON (II-Position)**

4. ACC = pin 16

The wires must be connected precisely and in sequence as in instruction. After connecting the last red cable to pin 16, blue LED on the emulator blinks and after a while will be flashing informing about running of the transmission. Led is Blinking fast, if after about 20 seconds it will blink slowly then disconnect emulator.

**Emulator VW EDC16 with CAN 2,7 - 3,0 TDI is a single use and it can be used only in one car.**

## AUDI, SEAT, SKODA, VW BOSCH ME7

Emulator immo Audi, Seat, Skoda, VW ME7 Petrol works with ECU Bosch ME7 with capacity: 1,4 - 1,8 - 2,0 - 2,4 - 2,6 - 2,8 - 3,0 - 3,5 - 4,2 cc  
From 1999 to about 2008

Two LEDs indicating:

**white** – power

**blue** – transmission (- adjusting to the driver – blinking 0,1 sec

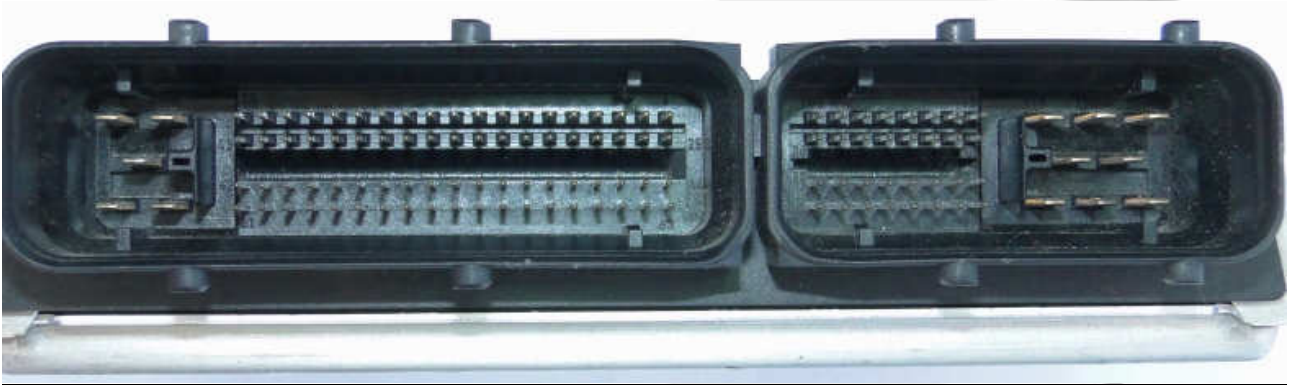
- after adjusting – 2 seconds is light on and then will stop for 0,1 sec)

Program selection ON/OFF is effected by soldering properly jumpers.

### BOSCH ME7 – 2 plug







Tested on ECU:

0 261 201 144 Golf V 1,4 2002-2006  
0 261 204 873 Audi A4/Passat 1,8 1999  
0 261 207 360 Bora 2,0 2000-2005  
0 261 206 123 Passat 2,8 2000  
0 261 206 019 Audi A8 4,2 2000  
0 261 207 534 Seat Leon 1,8 20V 2002

Replaces damaged immobilizer, instrument cluster or the car key.

It removes immobilizer from the computer - connect in once to the diagnostic plug OBD and it works.

In case of losing the car keys or a car burglary, it enable to drive off from the road to the car service.

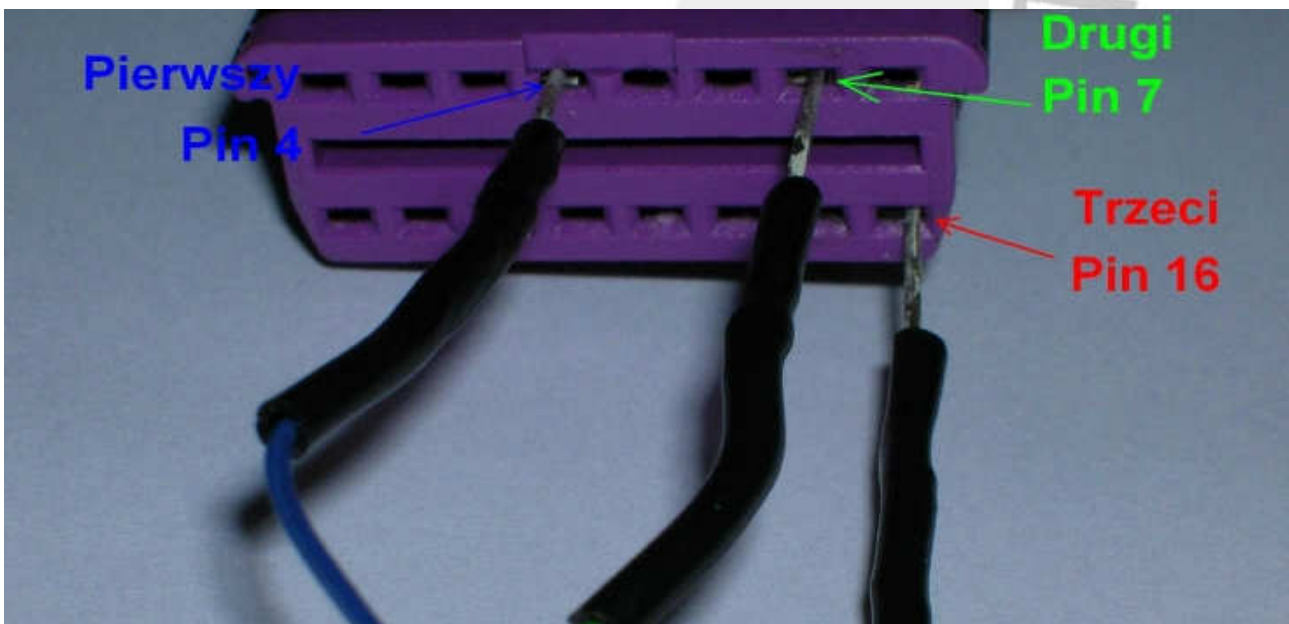
Cable color markings:

Red = Power

Blue = GND

Green = Code

Check before use through the diagnostic plug OBD if diagnosis with ECM is a stable



Wiring connection sequence (only wgen ignition switch is on):

1. **Ground** = pin 4
2. **Code** = pin 7

**→ Turn ignition switch ON (II-Position)**

3. Power = pin 16

Heads of the cables must be connected precisely in correct order as manual says.

After connecting the last red cable to pin 16, blue LED on the emulator blinks and after a while will be flashing informing about running of the transmission.

LED is blinking fast, if after about 20 seconds it blink slowly then disconnect emulator.

**Emulator BOSCH ME7 Petrol is a single use and it can be used only in one car.**

## Renault Tacho with CAN

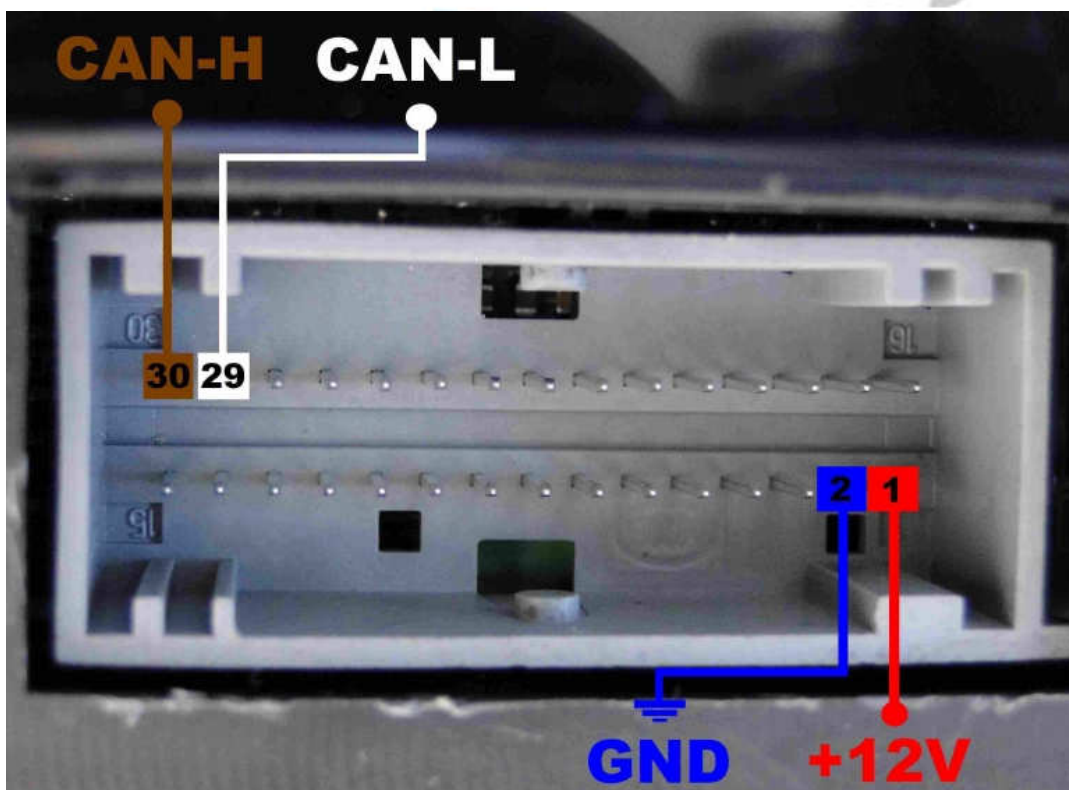
Tacho Emulator Renault Scenic II, Espace IV with CAN is used to turning on instrument cluster on the table to diagnose the fault. After connecting the emulator to the instrument cluster, most of segments of the display are displayed, making it easier to locate damaged areas.

The emulator allows you to repair the instrument cluster without visiting the car in the workshop.

**Emulator is reusable!**

Connection emulator to the plug of instrument cluster:

+ 12V = pin 1  
GND = pin 2  
CAN-H = pin 30  
CAN-L = pin 29



**NOTE: If it will not work, then you add the 12 Ohm resistor between CAN LINE**



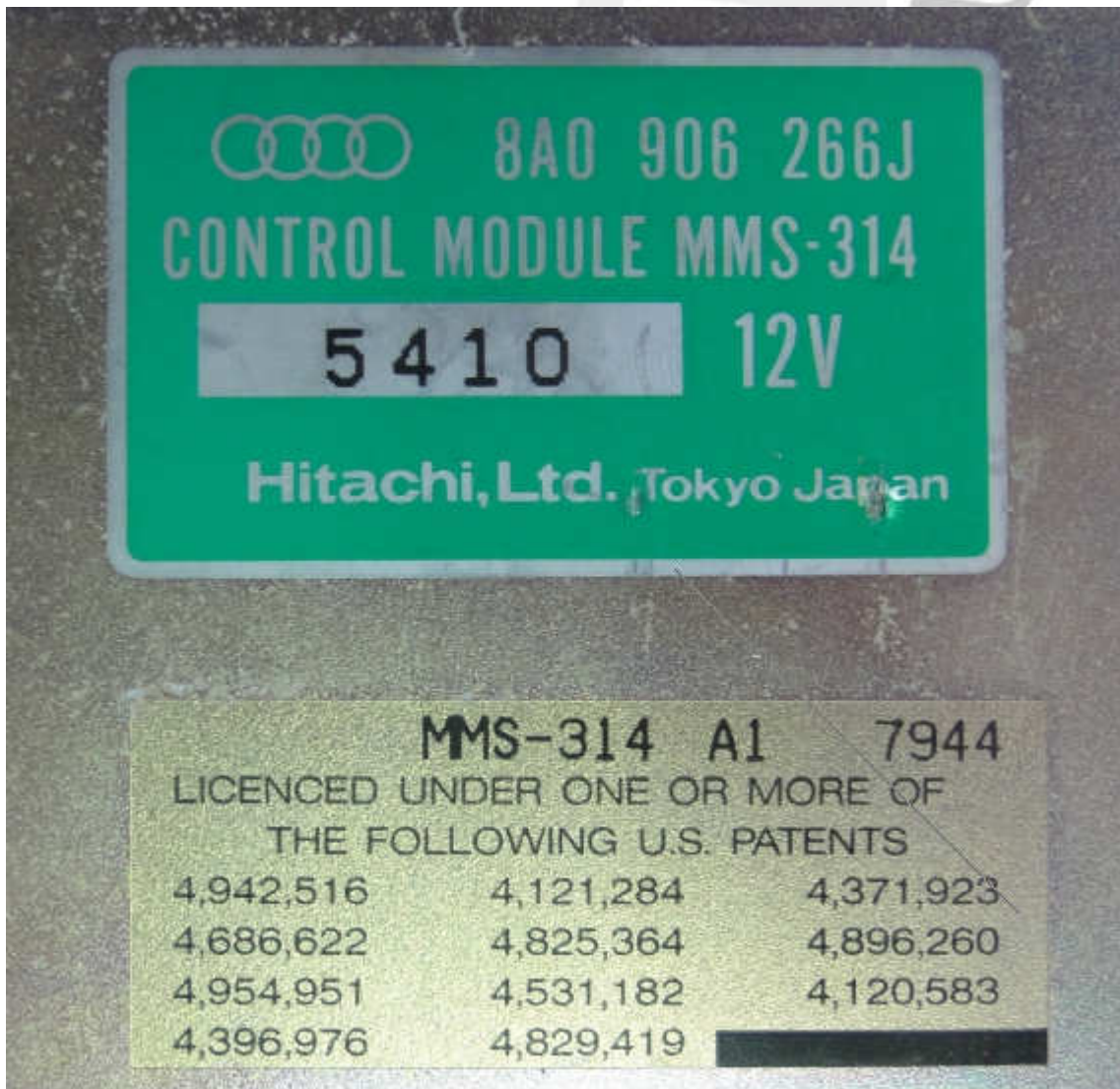
## VAG - ECU HITACHI

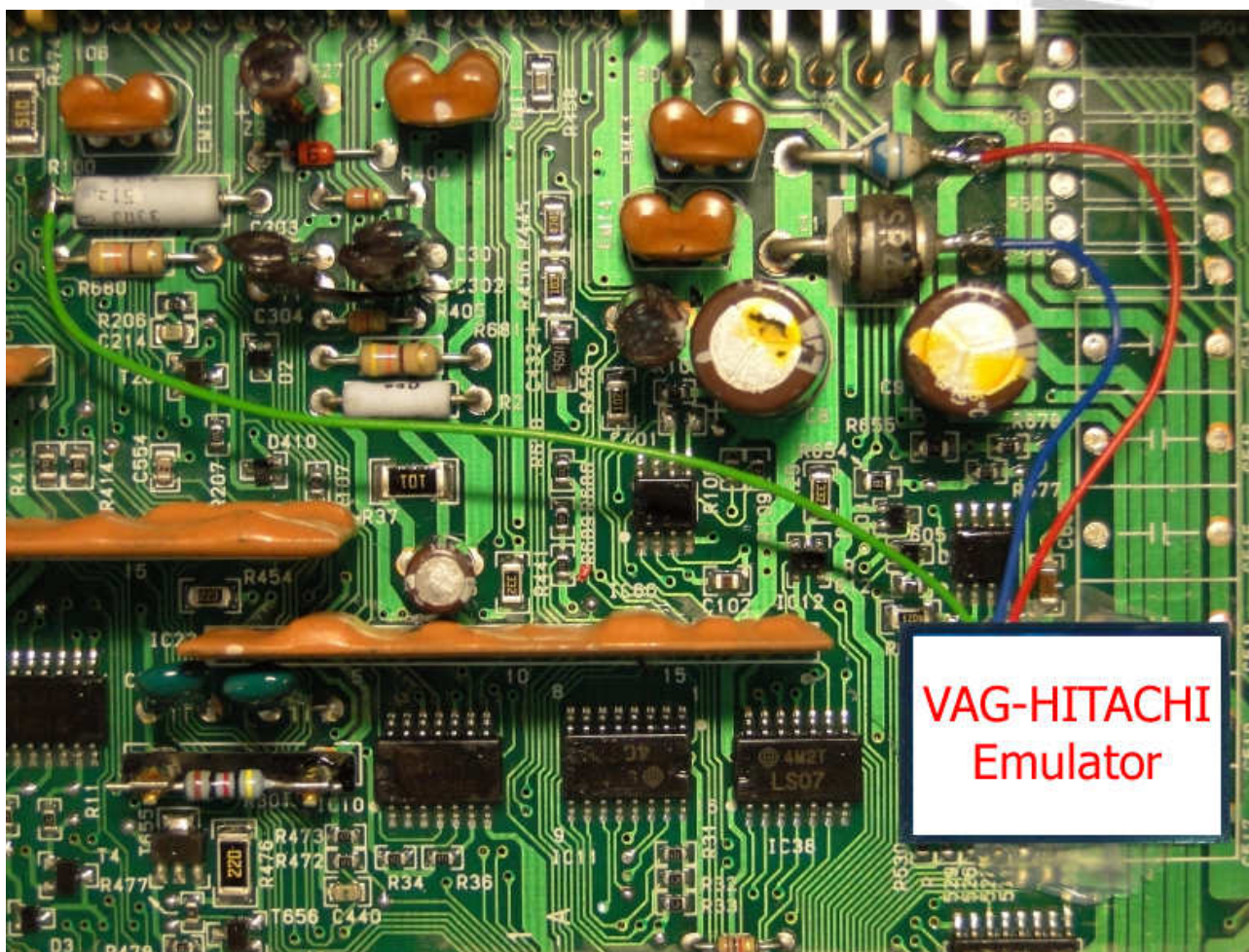
Emulator immo VW Hitachi, work in VW, Audi, Seat Skoda with engine control module Hitachi even up to 1997.

Emulator immo VAG Hitachi replaces damaged immobilizer or the car key.

DISCONNECT immo from the plug and connect W Line with K Line to have a diagnosis.

ECU AUDI A6 2800cc Gasoline → **ENGINE CODE: AAH**





**Power Supply** – connector D 8pin

**GND** – Connector D 1pin

**W-Line** – Connector C12pin

**Warning: Due to possible construction changes of the cars, before connecting the device check signals by multimeyer on the immobilizer plug or in ECU.**



## **VAG – Valve Code**

Emulator immo VAG Valve Code for VW, Audi, Seat Skoda, can be use to **unlock the valve code on injection pump in vehicles 1900cc D.**

Emulator immo VAG Valve Code replaces damaged immobilizer or the car key.

Connecting in place of the original immobilizer:

**GND** : Blue

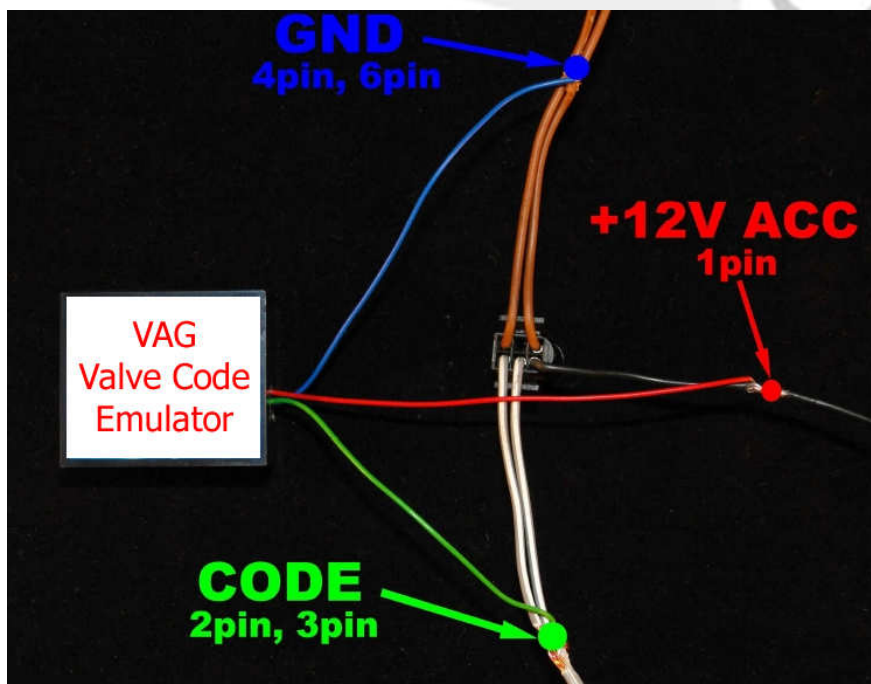
**+ACC** : Red

**Line W** : Green

Colors of the cables may be different, please check the marking on the emulator.

Disconnect immo from the plug and connect W line with K line to have a diagnosis

Connecting emulator to plug of the factory immobilizer:



**GND – pin 4 and 6**

**ACC – pin 1**

**K line – pin 3**

**W line – pin 2**

**Warning: Due to possible construction changes of the cars, before connecting the device check signals by multimeyer on the immobilizer plug or in ECU.**



## **MERCEDES CR1 with CAN EZS**

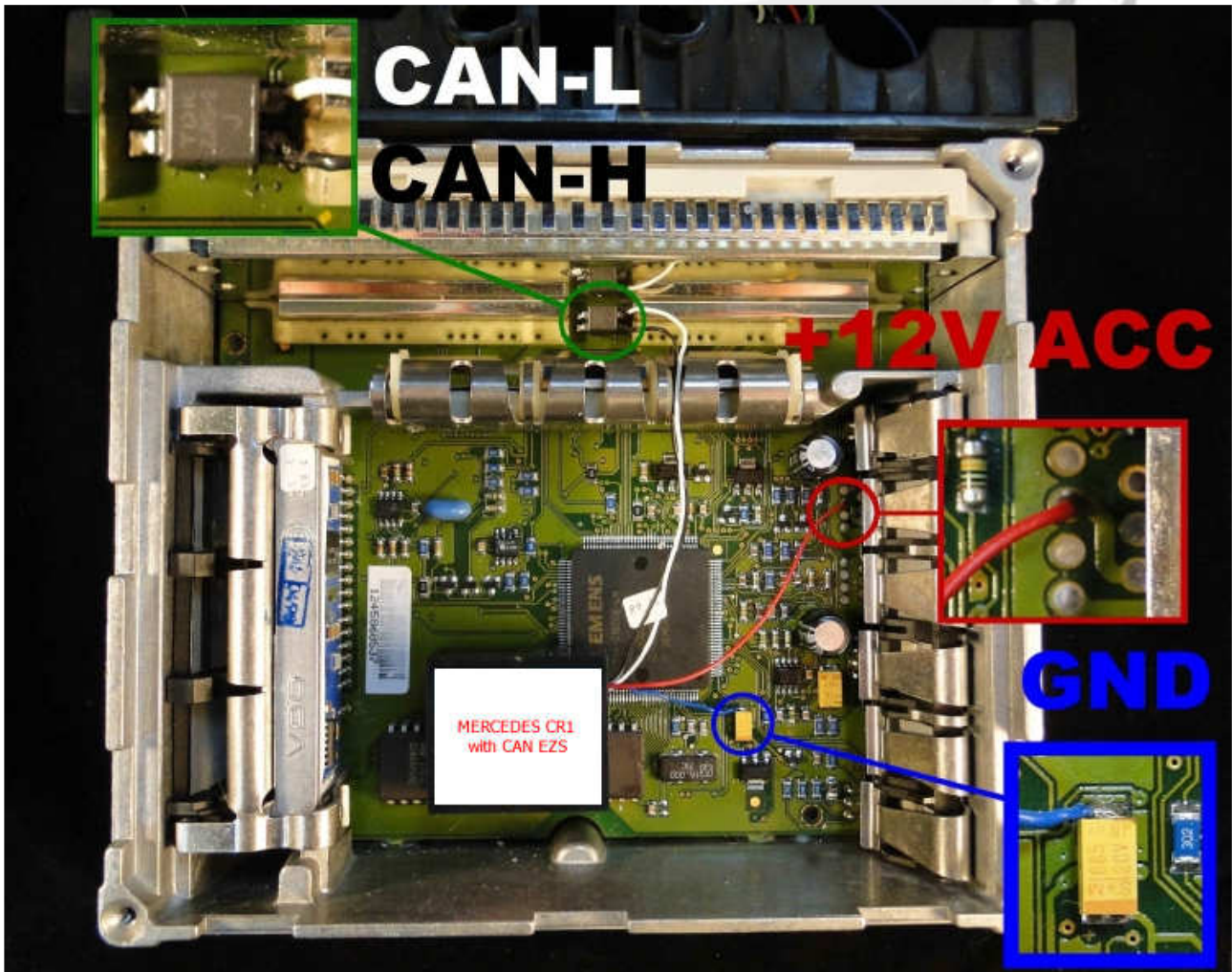
Mercedes ECU VDO 2 White Plugs with memory 24C02



**In the ECM find eeprom 24C02**



- 1) Run the reading of the EPROM 24C02**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



Connecting emulator to ECM with  
2 white plugs with eprom 24C02:

**GND:** 33pin

**Power:** 39pin

**CAN H:** gland suppression

**CAN L:** gland suppression

**After make personalization by tester HTT or  
Star Diagnosis engine must work 60 seconds, to finish coding.**

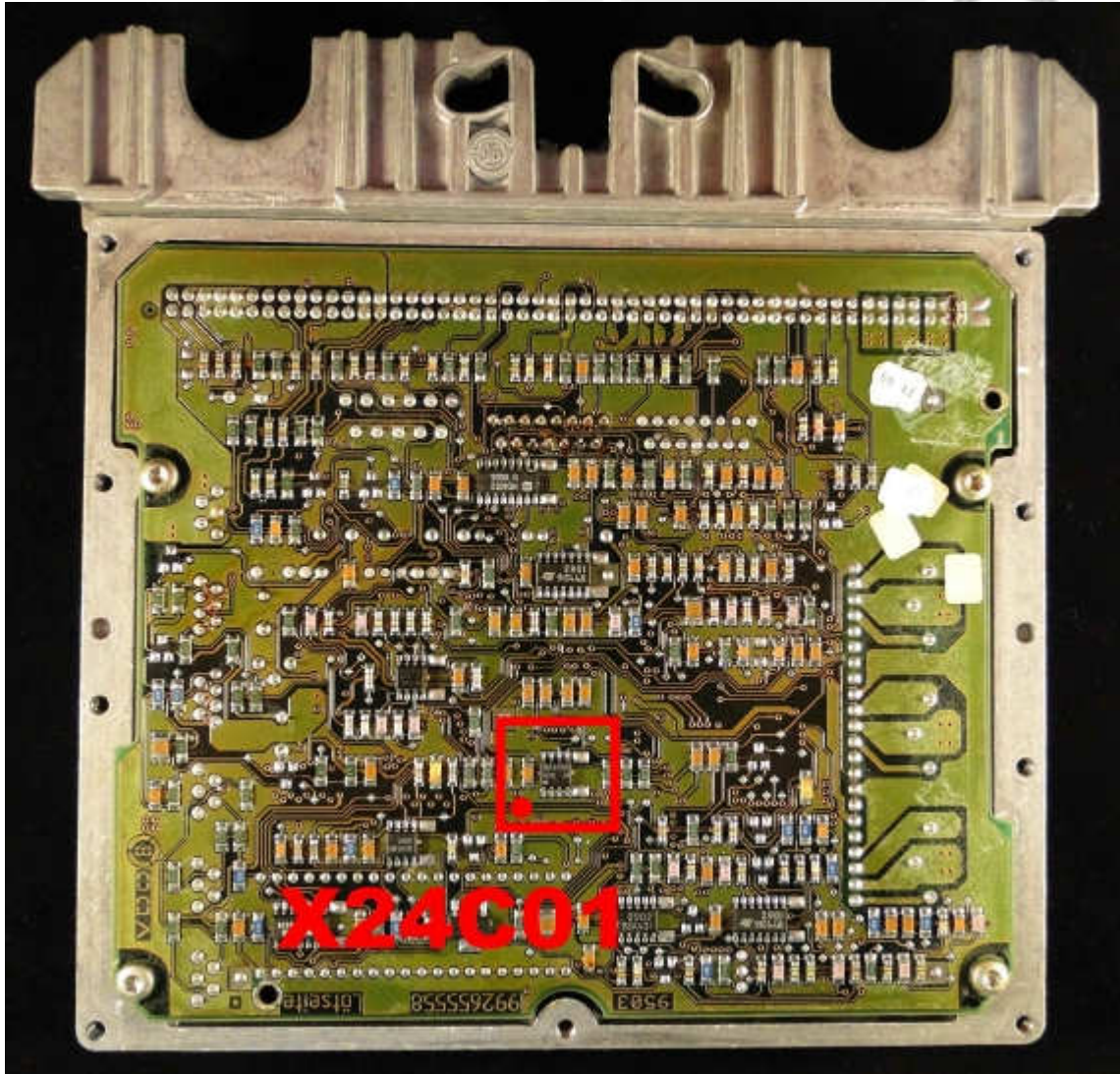


**MERCEDES CR1 with CAN INFRARED**

**Mercedes ECU VDO**  
**2 black plugs with memory X24C01**

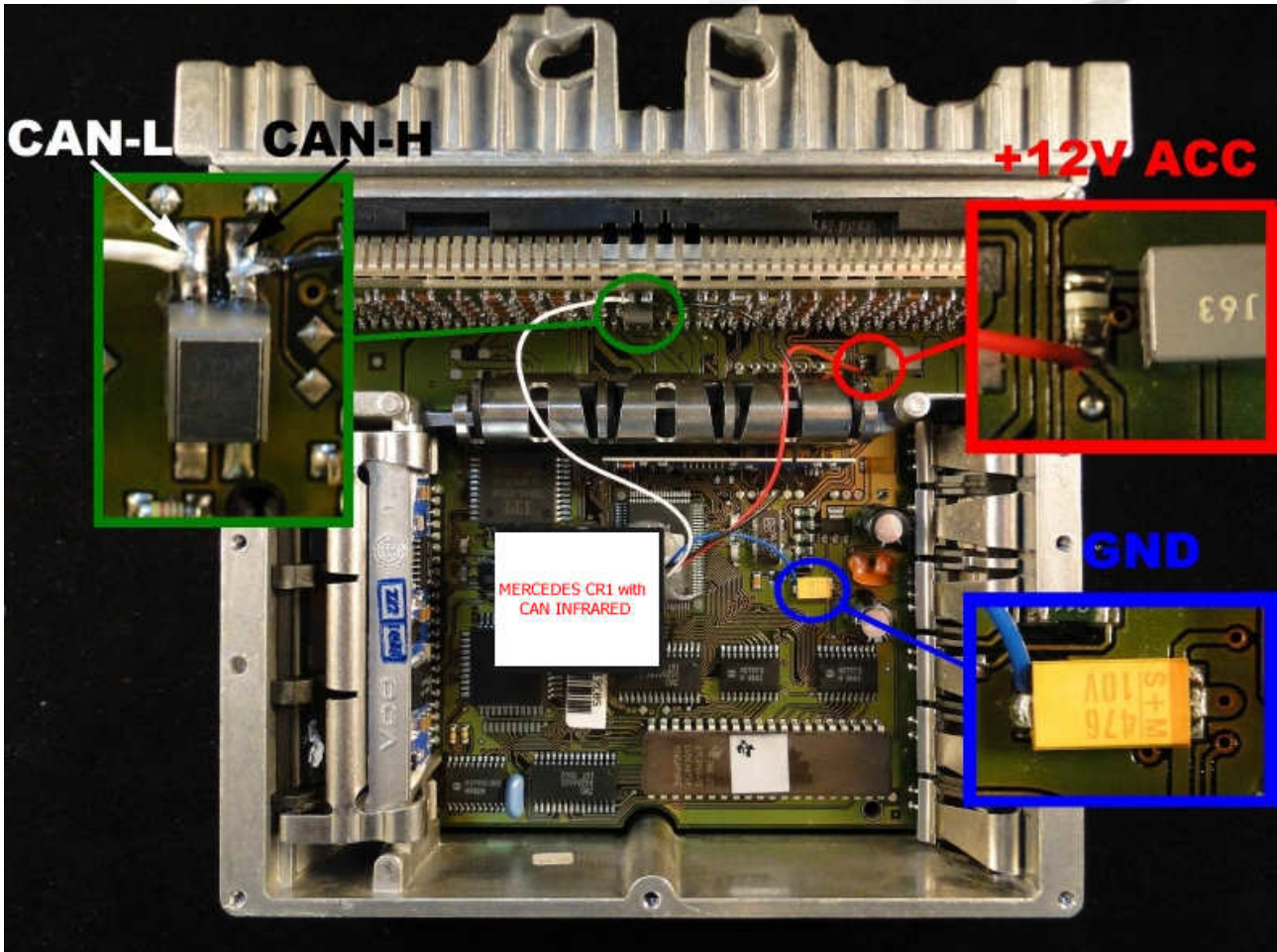


In the ECM find eeprom X24C01



- 1) Run the reading of the EPROM X24C01**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**





Connecting emulator to ECM with  
2 white plugs with eprom X24C01:

**GND:** 33pin

**Power:** 39pin

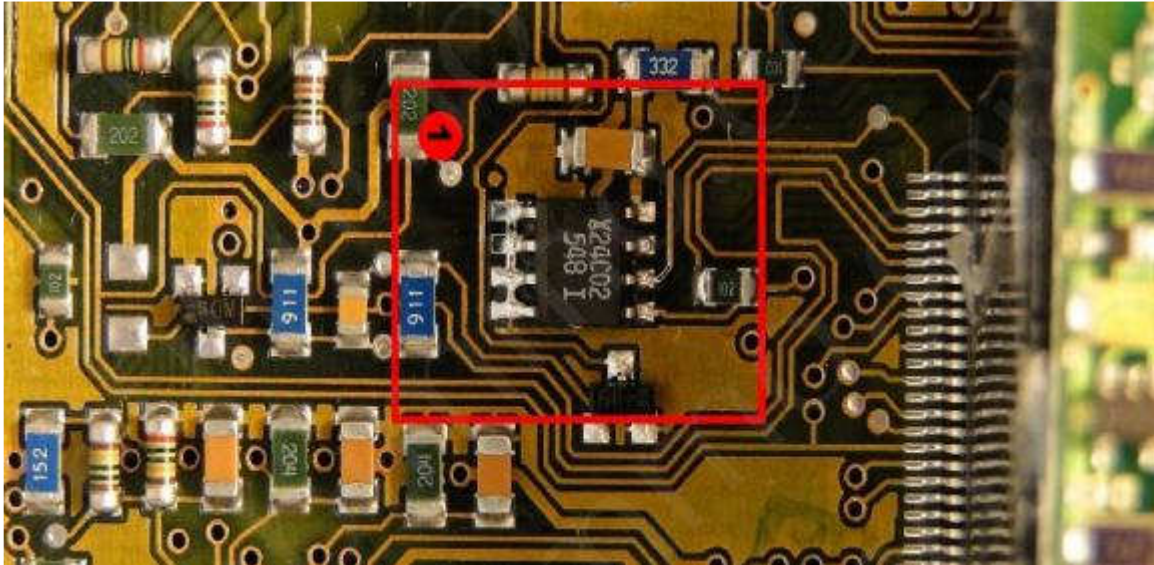
**CAN H:** gland suppression

**CAN L:** gland suppression

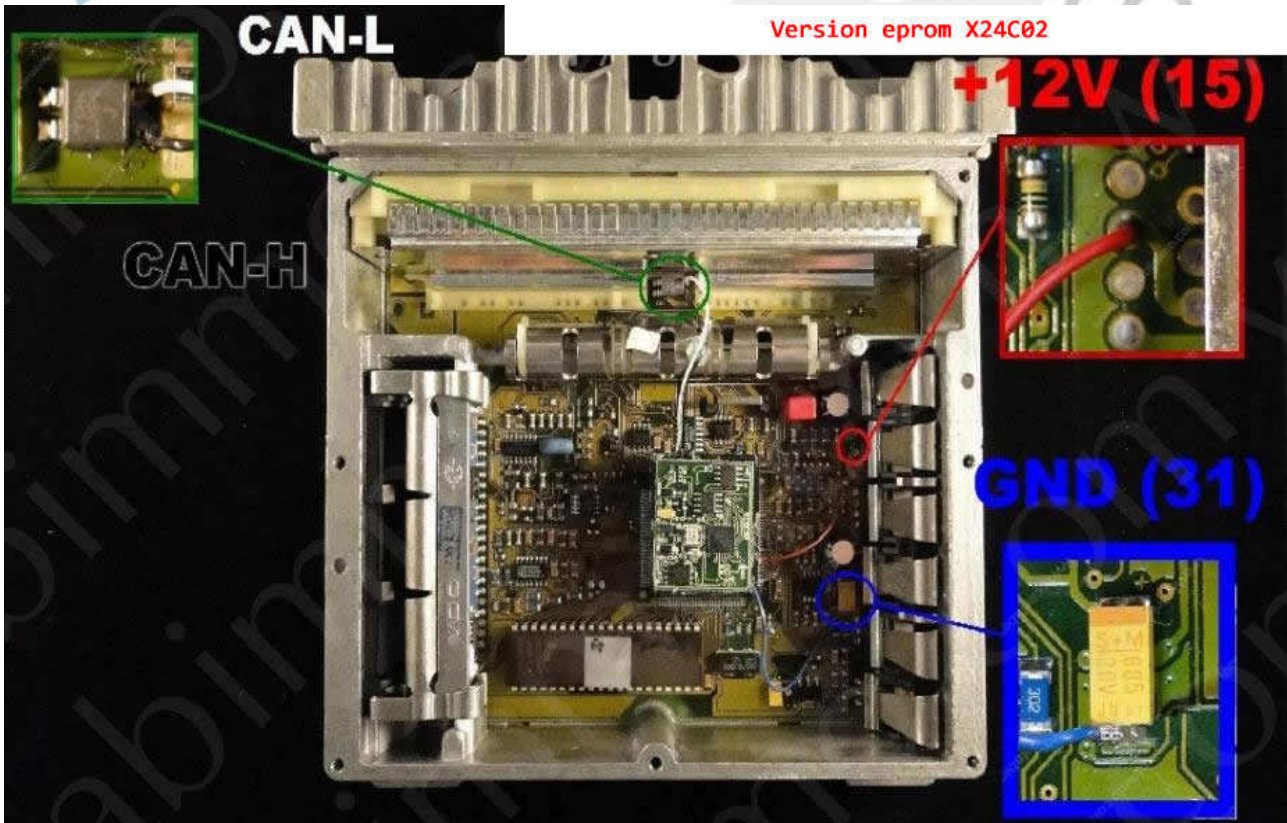
**After make personalization by tester HTT or  
Star Diagnosis engine must work 60 seconds, to finish coding.**



**Mercedes ECU VDO**  
**2 black plugs with memory X24C02**



- 1) Run the reading of the EPROM X24C02**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



Connecting emulator to ECM with  
2 white plugs with eeprom X24C02:

**GND:** 31pin

**Power:** 15pin

**CAN H:** gland suppression

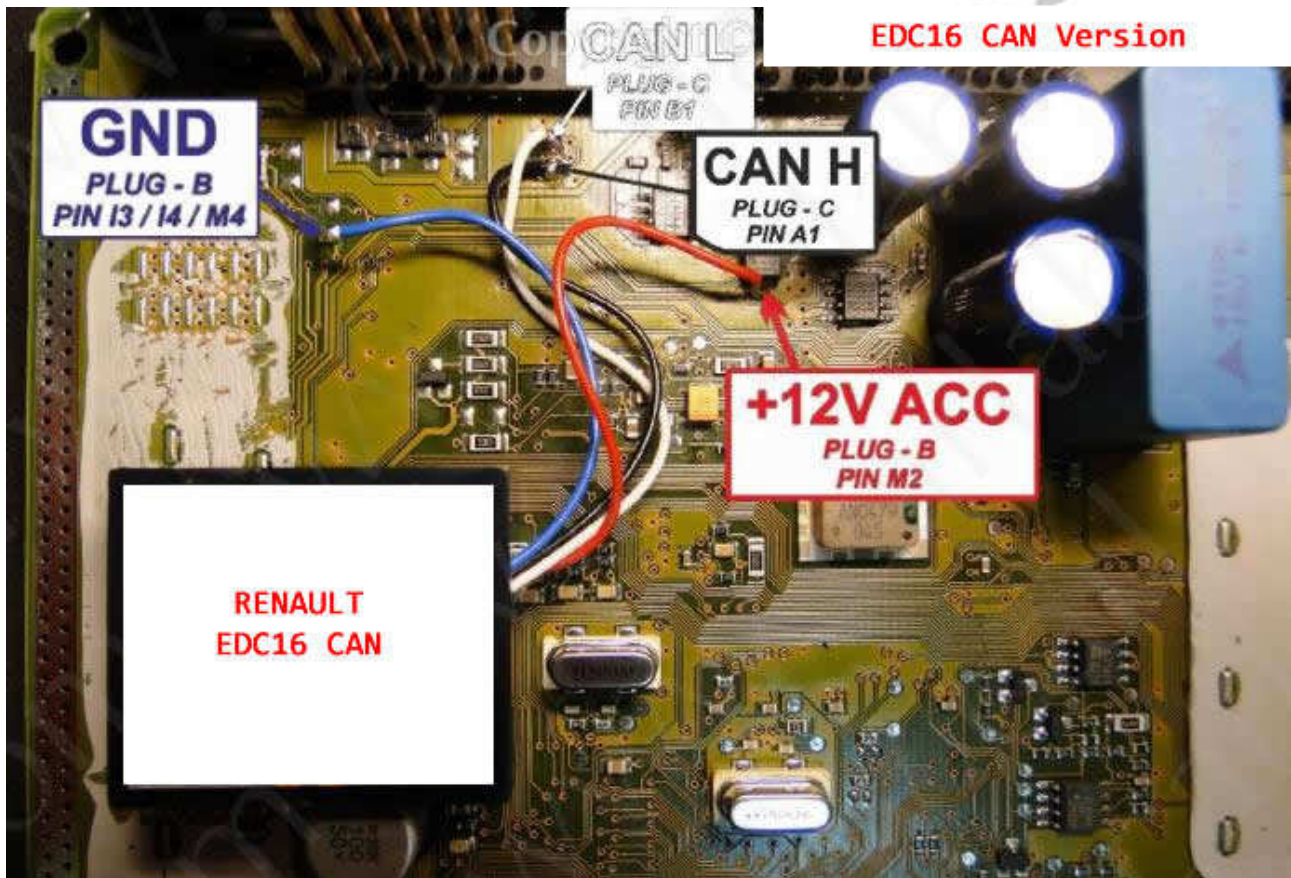
**CAN L:** gland suppression

**After make personalization by tester HTT or  
Star Diagnosis engine must work 60 seconds, to finish coding.**



**RENAULT CAN**

**BOSCH EDC16 3 plug with CAN**





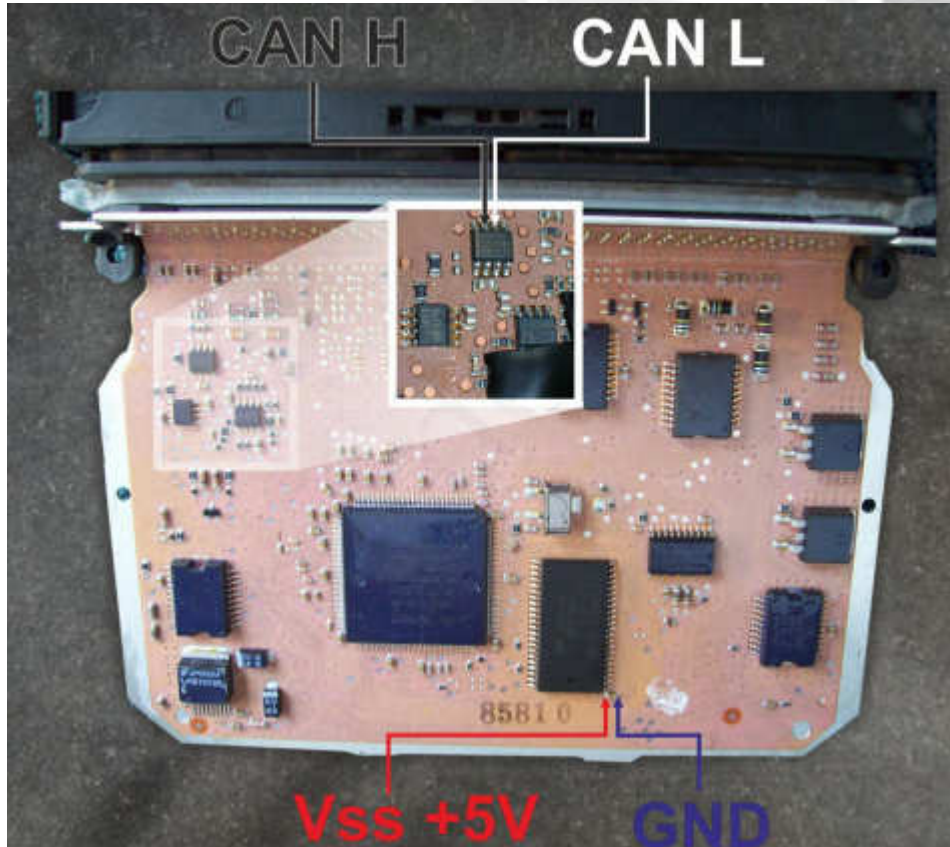
**BOSCH EDC15 3 plug with CAN**



- 1) Run the reading of the EPROM 5P08C3**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**

**EcuVonix**  
SOLUTIONS

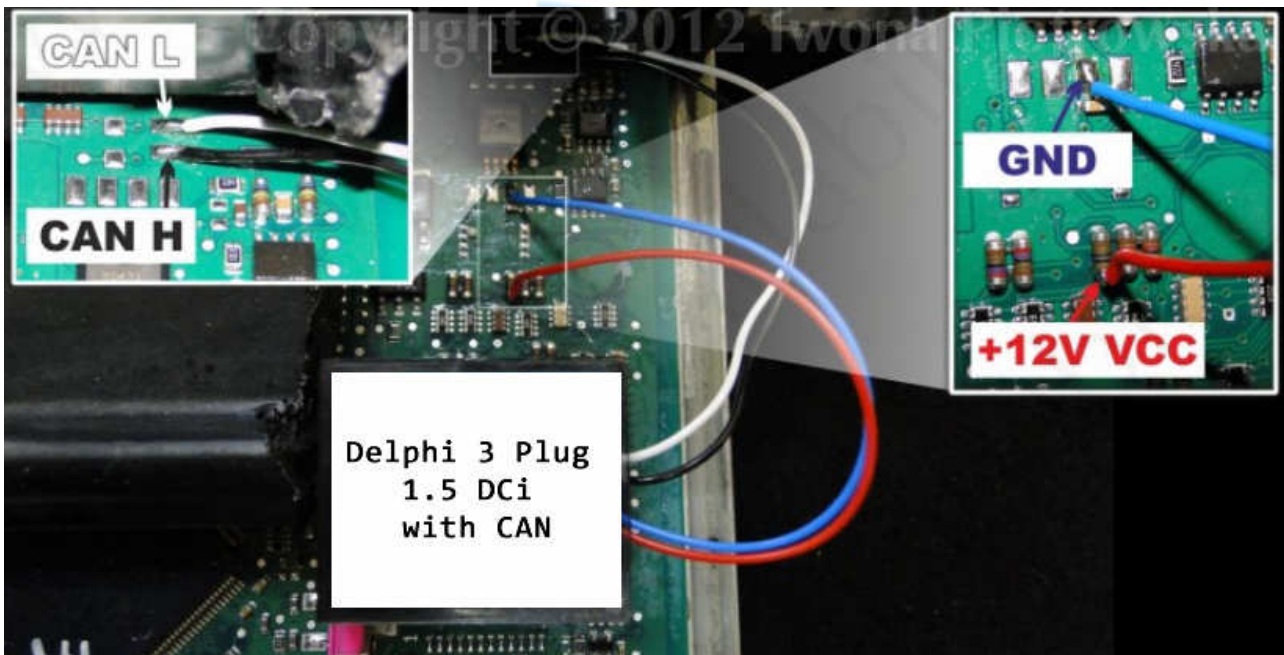
**Sirius 32 with CAN**

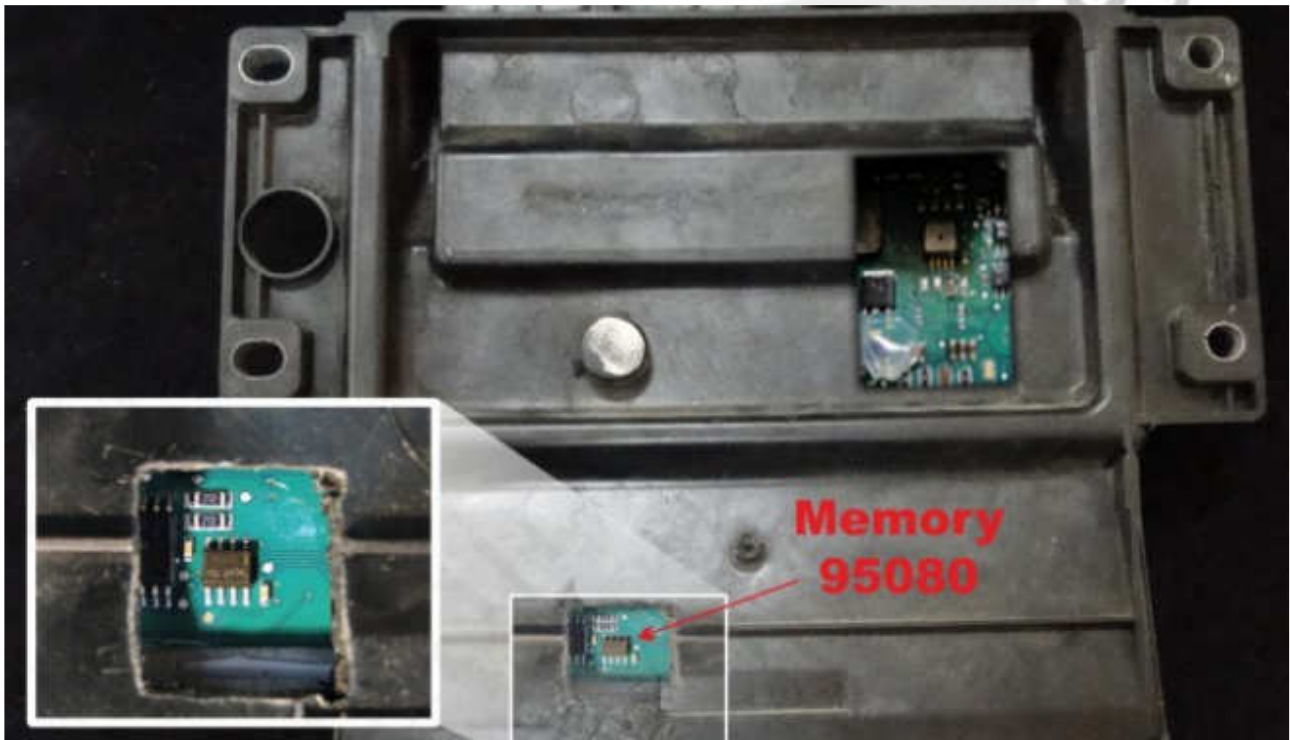


- 1) Run the reading of the Flash 29F200 or 29F400**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**



**Delphi 3 Plug 1.5 DCi with CAN (eprom 95080)**





- 1) Run the reading of the Eprom 95080**
- 2) Process the file with the software IMMO Universal Emulator**
- 3) Write with the new file generated**